

**LANCE R. LEFLEUR**  
DIRECTOR



**Alabama Department of Environmental Management**  
**adem.alabama.gov**

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463  
Montgomery, Alabama 36130-1463  
(334) 271-7700 ■ FAX (334) 271-7950

**ROBERT J. BENTLEY**  
GOVERNOR

**JUN 09 2015**

KEITH WILSON, VP & GENERAL MANAGER  
NTS HUNTSVILLE  
PO BOX 077777  
HUNTSVILLE AL 35807

RE: **DRAFT PERMIT**  
**NPDES PERMIT NUMBER: AL0056341**

Dear Mr. Wilson:

Transmitted herein is a draft of the referenced permit.

We would appreciate your comments on the permit within **30 days** of the date of this letter. Please direct any comments of a technical or administrative nature to the undersigned.

By copy of this letter and the draft permit, we are also requesting comments within the same time frame from EPA.

The Alabama Department of Environmental Management encourages you to voluntarily consider pollution prevention practices and alternatives at your facility. Pollution Prevention may assist you in complying with effluent limitations, and possibly reduce or eliminate monitoring requirements.

Should you have any questions, please contact Rachel Stanaland by e-mail at [restanaland@adem.state.al.us](mailto:restanaland@adem.state.al.us) or by phone at **(334)279-3065**.

Sincerely,  


Scott Ramsey, Chief  
Industrial Section  
Industrial/Municipal Branch  
Water Division

Enclosure: Draft Permit

pc via website: Montgomery Field Office  
EPA Region IV  
U.S. Fish & Wildlife Service  
AL Historical Commission  
Advisory Council on Historic Preservation  
Department of Conservation and Natural Resources

**Birmingham Branch**  
110 Vulcan Road  
Birmingham, AL 35209-4702  
(205) 942-6168  
(205) 941-1603 (FAX)

**Decatur Branch**  
2715 Sandlin Road, S.W.  
Decatur, AL 35603-1333  
(256) 353-1713  
(256) 340-9359 (FAX)



**Mobile Branch**  
2204 Perimeter Road  
Mobile, AL 36615-1131  
(251) 450-3400  
(251) 479-2593 (FAX)

**Mobile-Coastal**  
3664 Dauphin Street, Suite B  
Mobile, AL 36608  
(251) 304-1176  
(251) 304-1189 (FAX)



# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: NTS HUNTSVILLE

FACILITY LOCATION: 7800 HIGHWAY 20 WEST  
HUNTSVILLE, AL 35807

PERMIT NUMBER: AL0056341

RECEIVING WATERS: DSN001: INDIAN CREEK

*In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1378 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, Code of Alabama 1975, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.*

ISSUANCE DATE:

EFFECTIVE DATE:

EXPIRATION DATE:

## Draft

---

Alabama Department of Environmental Management

**INDUSTRIAL SECTION  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT**

**TABLE OF CONTENTS**

<b>PART I</b>	<b>DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS .....</b>	<b>1</b>
A.	DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS .....	1
B.	DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS .....	2
1.	Representative Sampling.....	2
2.	Test Procedures.....	2
3.	Recording of Results.....	2
4.	Records Retention and Production .....	2
5.	Monitoring Equipment and Instrumentation .....	3
C.	DISCHARGE REPORTING REQUIREMENTS .....	3
1.	Reporting of Monitoring Requirements .....	3
2.	Noncompliance Notification .....	5
D.	OTHER REPORTING AND NOTIFICATION REQUIREMENTS.....	5
1.	Anticipated Noncompliance.....	5
2.	Termination of Discharge .....	5
3.	Updating Information.....	5
4.	Duty to Provide Information .....	6
5.	Cooling Water and Boiler Water Additives.....	6
6.	Permit Issued Based On Estimated Characteristics .....	6
E.	SCHEDULE OF COMPLIANCE .....	6
<b>PART II</b>	<b>OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES.....</b>	<b>8</b>
A.	OPERATIONAL AND MANAGEMENT REQUIREMENTS.....	8
1.	Facilities Operation and Maintenance .....	8
2.	Best Management Practices .....	8
3.	Spill Prevention, Control, and Management.....	8
B.	OTHER RESPONSIBILITIES.....	8
1.	Duty to Mitigate Adverse Impacts .....	8
2.	Right of Entry and Inspection .....	8
C.	BYPASS AND UPSET .....	8
1.	Bypass.....	8
2.	Upset.....	9
D.	DUTY TO COMPLY WITH PERMIT, RULES, AND STATUTES.....	9
1.	Duty to Comply .....	9
2.	Removed Substances.....	9
3.	Loss or Failure of Treatment Facilities .....	10
4.	Compliance with Statutes and Rules .....	10
E.	PERMIT TRANSFER, MODIFICATION, SUSPENSION, REVOCATION, AND REISSUANCE .....	10
1.	Duty to Reapply or Notify of Intent to Cease Discharge.....	10
2.	Change in Discharge .....	10
3.	Transfer of Permit.....	11
4.	Permit Modification and Revocation.....	11
5.	Permit Termination .....	12
6.	Permit Suspension.....	12
7.	Request for Permit Action Does Not Stay Any Permit Requirement .....	12
F.	COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION.....	12
G.	DISCHARGE OF WASTEWATER GENERATED BY OTHERS .....	12
<b>PART III</b>	<b>OTHER PERMIT CONDITIONS.....</b>	<b>13</b>
A.	CIVIL AND CRIMINAL LIABILITY.....	13
B.	OIL AND HAZARDOUS SUBSTANCE LIABILITY .....	13
C.	PROPERTY AND OTHER RIGHTS .....	13
D.	AVAILABILITY OF REPORTS .....	14
E.	EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES.....	14
F.	COMPLIANCE WITH WATER QUALITY STANDARDS.....	14
G.	GROUNDWATER .....	14
H.	DEFINITIONS.....	14
I.	SEVERABILITY .....	17
<b>PART IV</b>	<b>ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS.....</b>	<b>18</b>
A.	COOLING WATER INTAKE STRUCTURE (CWIS) REQUIREMENTS .....	18

## PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

### A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge from the following point source(s) outfall(s), described more fully in the permittee's application:

DSN0011:D1 Unit Flushing, non-contact cooling water, cooling tower blowdown, and steam condensate. 3/

Such discharge shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTIC</u> Temperature, Water Deg. Fahrenheit	<u>DISCHARGE LIMITATIONS</u>			<u>MONITORING REQUIREMENTS 1/</u>		
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Daily Minimum</u>	<u>Measurement Frequency 2/</u> Monthly	<u>Sample Type</u> Grab	<u>Seasonal</u> -
Radioactivity 3/	-	-	-	Monthly	Grab	-
pH	-	-	6.0 S.U.	Monthly	Grab	-
Flow, In Conduit or Thru Treatment Plant	-	REPORT MGD	-	Monthly	Instantaneous	-
Chlorine, Total Residual 4/	-	-	-	Monthly	Grab	-
Solids, Total Dissolved	-	-	-	Monthly	Grab	-

### THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

- 1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.
- 2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.
- 3/ The permittee shall certify that the radioactive materials present in the wastewater do not exceed the requirements of the Alabama Department of Public Health
- 4/ A measurement of Total Residual Chlorine below 0.05 mg/L shall be considered in compliance with the permit limitations above and should be reported as NODJ=B or \*B on the discharge monitoring reports.

**B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS**

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this permit.

2. Test Procedures

For the purpose of reporting and compliance, permittees shall use one of the following procedures:

- a. For parameters with an EPA established Minimum Level (ML), report the measured value if the analytical result is at or above the ML and report "0" for values below the ML. Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 and guidelines published pursuant to Section 304(h) of the FWPCA, 33 U.S.C. Section 1314(h). If more than one method for analysis of a substance is approved for use, a method having a minimum level lower than the permit limit shall be used. If the minimum level of all methods is higher than the permit limit, the method having the lowest minimum level shall be used and a report of less than the minimum level shall be reported as zero and will constitute compliance; however, should EPA approve a method with a lower minimum level during the term of this permit the permittee shall use the newly approved method.

- b. For pollutants parameters without an established ML, an interim ML may be utilized. The interim ML shall be calculated as 3.18 times the Method Detection Level (MDL) calculated pursuant to 40 CFR Part 136, Appendix B.

Permittees may develop an effluent matrix-specific ML, where an effluent matrix prevents attainment of the established ML. However, a matrix specific ML shall be based upon proper laboratory method and technique. Matrix-specific MLs must be approved by the Department, and may be developed by the permittee during permit issuance, reissuance, modification, or during compliance schedule.

In either case the measured value should be reported if the analytical result is at or above the ML and "0" reported for values below the ML.

- c. For parameters without an EPA established ML, interim ML, or matrix-specific ML, a report of less than the detection limit shall constitute compliance if the detection limit of all analytical methods is higher than the permit limit using the most sensitive EPA approved method. For the purpose of calculating a monthly average, "0" shall be used for values reported less than the detection limit.

The Minimum Level utilized for procedures A and B above shall be reported on the permittee's DMR. When an EPA approved test procedure for analysis of a pollutant does not exist, the Director shall approve the procedure to be used.

3. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The facility name and location, point source number, date, time and exact place of sampling;
- b. The name(s) of person(s) who obtained the samples or measurements;
- c. The dates and times the analyses were performed;
- d. The name(s) of the person(s) who performed the analyses;
- e. The analytical techniques or methods used, including source of method and method number; and
- f. The results of all required analyses.

4. Records Retention and Production

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the above reports or the application for this permit, for a period of at least three years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time. If litigation or other enforcement action, under the AWPCA and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director or his designee, the permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records shall not be submitted unless requested.

All records required to be kept for a period of three years shall be kept at the permitted facility or an alternate location approved by the Department in writing and shall be available for inspection.

5. Monitoring Equipment and Instrumentation

All equipment and instrumentation used to determine compliance with the requirements of this permit shall be installed, maintained, and calibrated in accordance with the manufacturer's instructions or, in the absence of manufacturer's instructions, in accordance with accepted practices. The permittee shall develop and maintain quality assurance procedures to ensure proper operation and maintenance of all equipment and instrumentation. The quality assurance procedures shall include the proper use, maintenance, and installation, when appropriate, of monitoring equipment at the plant site.

C. DISCHARGE REPORTING REQUIREMENTS

1. Reporting of Monitoring Requirements

- a. The permittee shall conduct the required monitoring in accordance with the following schedule:

MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY shall be conducted during the first full month following the effective date of coverage under this permit and every month thereafter.

QUARTERLY MONITORING shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring may be done anytime during the quarter, unless restricted elsewhere in this permit, but it should be submitted with the last DMR due for the quarter, i.e. (March, June, September and December DMRs).

SEMIANNUAL MONITORING shall be conducted at least once during the period of January through June and at least once during the period of July through December. The permittee shall conduct the semiannual monitoring during the first complete calendar semiannual period following the effective date of this permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this permit, but it should be submitted with the last DMR due for the month of the semiannual period, i.e. (June and December DMRs).

ANNUAL MONITORING shall be conducted at least once during the period of January through December. The permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this permit and is then required to monitor once during each annual period thereafter. Annual monitoring may be done anytime during the year, unless restricted elsewhere in this permit, but it should be submitted with the December DMR.

- b. The permittee shall submit discharge monitoring reports (DMRs) on the forms provided by the Department and in accordance with the following schedule:

REPORTS OF MORE FREQUENTLY THAN MONTHLY AND MONTHLY TESTING shall be submitted on a [monthly] or [quarterly] basis. The first report is due on the 28th day of [ ]. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

REPORTS OF QUARTERLY TESTING shall be submitted on a quarterly basis. The first report is due on the 28th day of [ ]. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

REPORTS OF SEMIANNUAL TESTING shall be submitted on a semiannual basis. The reports are due on the 28th day of JANUARY and the 28th day of JULY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

REPORTS OF ANNUAL TESTING shall be submitted on an annual basis. The first report is due on the 28th day of JANUARY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

- c. The Department is utilizing a web-based electronic environmental (E2) DMR reporting system for submittal of DMRs. **If the permittee is not already participating in the E2 DMR system, the permittee must apply for participation in the system within 180 days of coverage under this permit unless the facility submits in writing valid justification as to why they cannot participate and the Department approves in writing utilization of hard copy DMR submittals.** Once the permittee is enrolled in the E2 DMR system, the permittee must utilize the system for the submittal of DMRs unless otherwise allowed by this permit. To participate in the E2 DMR system, the Permittee Participation Package may be downloaded online at <https://e2.adem.alabama.gov/npdes>. If the E2 DMR system is down (i.e., electronic submittal of DMR data is unable to be completed due to technical problems originating with the

Department's system: this could include entry/submittal issues with an entire set of DMRs or individual parameters), the permittee is not relieved of their obligation to submit DMR data to the Department by the required submittal date. However, if the E2 DMR system is down on the 28<sup>th</sup> day of the month or is down for an extended period of time as determined by the Department when a DMR is required to be submitted, the facility may submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date. Within five calendar days of the E2 DMR system resuming operation, the permittee shall enter the data into the E2 DMR system, unless an alternate timeframe is approved by the Department. An attachment should be included with the E2 DMR submittal verifying the original submittal date (date of the fax, copy of dated e-mail, or hand-delivery stamped date). If a permittee is allowed to submit via the US Postal Service, the DMR must be legible and bear an original signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this permit. If the permittee, using approved analytical methods as specified in Provision I.B.2, monitors any discharge from a point source for a limited substance identified in Provision I.A of this permit more frequently than required by this permit, the results of such monitoring shall be included in the calculation and reporting of values on the DMR form and the increased frequency shall be indicated on the DMR form. In the event no discharge from a point source identified in Provision I.A of this permit and described more fully in the permittee's application occurs during a monitoring period, the permittee shall report "No Discharge" for such period on the appropriate DMR form.

- d. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules and Regulations, shall be electronically signed (or, if allowed by the Department, traditionally signed) by a "responsible official" of the permittee as defined in ADEM Administrative Code Rule 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADEM Administrative Code Rule 335-6-6-.09 and shall bear the following certification:

*"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

- e. All Discharge Monitoring Report forms required to be submitted by this permit, the AWPCA, and the Department's Rules shall be addressed to:

**Alabama Department of Environmental Management  
Permits and Services Division  
Environmental Data Section  
Post Office Box 301463  
Montgomery, Alabama 36130-1463**

Certified and Registered Mail containing Discharge Monitoring Reports shall be addressed to:

**Alabama Department of Environmental Management  
Permits and Services Division  
Environmental Data Section  
1400 Coliseum Boulevard  
Montgomery, Alabama 36110-2059**

- f. All other correspondence and reports required to be submitted by this permit, the AWPCA, and the Department's Rules shall be addressed to:

**Alabama Department of Environmental Management  
Water Division  
Post Office Box 301463  
Montgomery, Alabama 36130-1463**

Certified and Registered Mail shall be addressed to:

**Alabama Department of Environmental Management  
Water Division  
1400 Coliseum Boulevard  
Montgomery, Alabama 36110-2059**

- g. If this permit is a reissuance, then the permittee shall continue to submit DMRs in accordance with the requirements of their previous permit until such time as DMRs are due as discussed in Part I.C.1.b. above.

**2. Noncompliance Notification**

**a. 24-Hour Noncompliance Reporting**

The permittee shall report to the Director, within 24-hours of becoming aware of the noncompliance, any noncompliance which may endanger health or the environment. This shall include but is not limited to the following circumstances:

- (1) does not comply with any daily minimum or maximum discharge limitation for an effluent characteristic specified in Provision I. A. of this permit which is denoted by an "(X)";
- (2) threatens human health or welfare, fish or aquatic life, or water quality standards;
- (3) does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a);
- (4) contains a quantity of a hazardous substance which has been determined may be harmful to public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. Section 1321(b)(4);
- (5) exceeds any discharge limitation for an effluent characteristic as a result of an unanticipated bypass or upset; and
- (6) is an unpermitted direct or indirect discharge of a pollutant to a water of the state (unpermitted discharges properly reported to the Department under any other requirement are not required to be reported under this provision).

The permittee shall orally report the occurrence and circumstances of such discharge to the Director within 24-hours after the permittee becomes aware of the occurrence of such discharge. In addition to the oral report, the permittee shall submit to the Director or Designee a written report as provided in Part I.C.2.c no later than five (5) days after becoming aware of the occurrence of such discharge.

b. If for any reason, the permittee's discharge does not comply with any limitation of this permit, the permittee shall submit to the Director or Designee a written report as provided in Part I.C.2.c below, such report shall be submitted with the next Discharge Monitoring Report required to be submitted by Part I.C.1 of this permit after becoming aware of the occurrence of such noncompliance.

c. Any written report required to be submitted to the Director or Designee by Part I.C.2 a. or b. shall be submitted using a copy of the Noncompliance Notification Form provided with this permit and shall include the following information:

- (1) A description of the discharge and cause of noncompliance;
- (2) The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and
- (3) A description of the steps taken and/or being taken to reduce or eliminate the noncomplying discharge and to prevent its recurrence.

**D. OTHER REPORTING AND NOTIFICATION REQUIREMENTS**

**1. Anticipated Noncompliance**

The permittee shall give the Director written advance notice of any planned changes or other circumstances regarding a facility which may result in noncompliance with permit requirements.

**2. Termination of Discharge**

The permittee shall notify the Director, in writing, when all discharges from any point source(s) identified in Provision I. A. of this permit have permanently ceased. This notification shall serve as sufficient cause for instituting procedures for modification or termination of the permit.

**3. Updating Information**

a. The permittee shall inform the Director of any change in the permittee's mailing address, telephone number or in the permittee's designation of a facility contact or office having the authority and responsibility to prevent and abate violations of the AWPCA, the Department's Rules, and the terms and conditions of this permit, in writing, no later than ten (10) days after such change. Upon request of the Director or his designee, the permittee shall furnish the Director with an update of any information provided in the permit application.



- b. If the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

4. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director or his designee may request to determine whether cause exists for modifying, revoking and re-issuing, suspending, or terminating this permit, in whole or in part, or to determine compliance with this permit.

5. Cooling Water and Boiler Water Additives

- a. The permittee shall notify the Director in writing not later than thirty (30) days prior to instituting the use of any biocide corrosion inhibitor or chemical additive in a cooling or boiler system, not identified in the application for this permit, from which discharge is allowed by this permit. Notification is not required for additives that do not contain a heavy metal(s) as an active ingredient and that pass through a wastewater treatment system prior to discharge nor is notification required for additives that should not reasonably be expected to cause the cooling water or boiler water to exhibit toxicity as determined by analysis of manufacturer's data or testing by the permittee. Such notification shall include:
  - (1) name and general composition of biocide or chemical;
  - (2) 96-hour median tolerance limit data for organisms representative of the biota of the waterway into which the discharge will ultimately reach;
  - (2) quantities to be used;
  - (3) frequencies of use;
  - (4) proposed discharge concentrations; and
  - (6) EPA registration number, if applicable.
- b. The use of a biocide or additive containing tributyl tin, tributyl tin oxide, zinc, chromium or related compounds in cooling or boiler system(s), from which a discharge regulated by this permit occurs, is prohibited except as exempted below. The use of a biocide or additive containing zinc, chromium or related compounds may be used in special circumstances if (1) the permit contains limits for these substances, or (2) the applicant demonstrates during the application process that the use of zinc, chromium or related compounds as a biocide or additive will not pose a reasonable potential to violate the applicable State water quality standards for these substances. The use of any additive, not identified in this permit or in the application for this permit or not exempted from notification under this permit is prohibited, prior to a determination by the Department that permit modification to control discharge of the additive is not required or prior to issuance of a permit modification controlling discharge of the additive.

6. Permit Issued Based On Estimated Characteristics

- a. If this permit was issued based on estimates of the characteristics of a process discharge reported on an EPA NPDES Application Form 2D (EPA Form 3510-2D), the permittee shall complete and submit an EPA NPDES Application Form 2C (EPA Form 3510-2C) no later than two years after the date that discharge begins. Sampling required for completion of the Form 2C shall occur when a discharge(s) from the process(s) causing the new or increased discharge is occurring. If this permit was issued based on estimates concerning the composition of a stormwater discharge(s), the permittee shall perform the sampling required by EPA NPDES Application Form 2F (EPA Form 3510-2F) no later than one year after the industrial activity generating the stormwater discharge has been fully initiated.
- b. This permit shall be reopened if required to address any new information resulting from the completion and submittal of the Form 2C and or 2F.

**E. SCHEDULE OF COMPLIANCE**

- 1. The permittee shall achieve compliance with the discharge limitations specified in Provision I. A. in accordance with the following schedule:

**COMPLIANCE SHALL BE ATTAINED ON THE EFFECTIVE DATE OF THIS PERMIT**

- 2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or

noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

**PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES**

**A. OPERATIONAL AND MANAGEMENT REQUIREMENTS**

1. Facilities Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities only when necessary to achieve compliance with the conditions of the permit.

2. Best Management Practices

- a. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director or his designee has granted prior written authorization for dilution to meet water quality requirements.
- b. The permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 C.F.R. Section 112 if required thereby.
- c. The permittee shall prepare, submit for approval and implement a Best Management Practices (BMP) Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a significant potential for discharge, if so required by the Director or his designee. When submitted and approved, the BMP Plan shall become a part of this permit and all requirements of the BMP Plan shall become requirements of this permit.

3. Spill Prevention, Control, and Management

The permittee shall provide spill prevention, control, and/or management sufficient to prevent any spills of pollutants from entering a water of the state or a publicly or privately owned treatment works. Any containment system used to implement this requirement shall be constructed of materials compatible with the substance(s) contained and which shall prevent the contamination of groundwater and such containment system shall be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided.

**B. OTHER RESPONSIBILITIES**

1. Duty to Mitigate Adverse Impacts

The permittee shall promptly take all reasonable steps to mitigate and minimize or prevent any adverse impact on human health or the environment resulting from noncompliance with any discharge limitation specified in Provision I. A. of this permit, including such accelerated or additional monitoring of the discharge and/or the receiving waterbody as necessary to determine the nature and impact of the noncomplying discharge.

2. Right of Entry and Inspection

The permittee shall allow the Director, or an authorized representative, upon the presentation of proper credentials and other documents as may be required by law to:

- a. enter upon the permittee's premises where a regulated facility or activity or point source is located or conducted, or where records must be kept under the conditions of the permit;
- b. have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- c. inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and
- d. sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

**C. BYPASS AND UPSET**

1. Bypass

- a. Any bypass is prohibited except as provided in b. and c. below:
- b. A bypass is not prohibited if:

- (1) It does not cause any discharge limitation specified in Provision I. A. of this permit to be exceeded;

- (2) It enters the same receiving stream as the permitted outfall; and
    - (3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system.
  - c. A bypass is not prohibited and need not meet the discharge limitations specified in Provision I. A. of this permit if:
    - (1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;
    - (2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime (this condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and
    - (3) The permittee submits a written request for authorization to bypass to the Director at least ten (10) days prior to the anticipated bypass (if possible), the permittee is granted such authorization, and the permittee complies with any conditions imposed by the Director to minimize any adverse impact on human health or the environment resulting from the bypass.
  - d. The permittee has the burden of establishing that each of the conditions of Provision II.C.1.b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in a. and an exemption, where applicable, from the discharge limitations specified in Provision I. A. of this permit.
- 2. Upset
  - a. A discharge which results from an upset need not meet the discharge limitations specified in Provision I. A. of this permit if:
    - (1) No later than 24-hours after becoming aware of the occurrence of the upset, the permittee orally reports the occurrence and circumstances of the upset to the Director or his designee; and
    - (2) No later than five (5) days after becoming aware of the occurrence of the upset, the permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, or other relevant evidence, demonstrating that (i) an upset occurred; (ii) the permittee can identify the specific cause(s) of the upset; (iii) the permittee's facility was being properly operated at the time of the upset; and (iv) the permittee promptly took all reasonable steps to minimize any adverse impact on human health or the environment resulting from the upset.
  - b. The permittee has the burden of establishing that each of the conditions of Provision II. C.2.a. of this permit have been met to qualify for an exemption from the discharge limitations specified in Provision I.A. of this permit.

**D. DUTY TO COMPLY WITH PERMIT, RULES, AND STATUTES**

- 1. Duty to Comply
  - a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the AWPCA and the FWPCA and is grounds for enforcement action, for permit termination, revocation and reissuance, suspension, modification; or denial of a permit renewal application.
  - b. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of the permit shall not be a defense for a permittee in an enforcement action.
  - c. The discharge of a pollutant from a source not specifically identified in the permit application for this permit and not specifically included in the description of an outfall in this permit is not authorized and shall constitute noncompliance with this permit.
  - d. The permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this permit or to minimize or prevent any adverse impact of any permit violation.
  - e. Nothing in this permit shall be construed to preclude and negate the permittee's responsibility or liability to apply for, obtain, or comply with other ADEM, Federal, State, or Local Government permits, certifications, licenses, or other approvals.
- 2. Removed Substances

Solids, sludges, filter backwash, or any other pollutant or other waste removed in the course of treatment or control of wastewaters shall be disposed of in a manner that complies with all applicable Department Rules.

3. Loss or Failure of Treatment Facilities

Upon the loss or failure of any treatment facilities, including but not limited to the loss or failure of the primary source of power of the treatment facility, the permittee shall, where necessary to maintain compliance with the discharge limitations specified in Provision I. A. of this permit, or any other terms or conditions of this permit, cease, reduce, or otherwise control production and/or all discharges until treatment is restored. If control of discharge during loss or failure of the primary source of power is to be accomplished by means of alternate power sources, standby generators, or retention of inadequately treated effluent, the permittee must furnish to the Director within six months a certification that such control mechanisms have been installed.

4. Compliance with Statutes and Rules

- a. This permit has been issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter, that are applicable to this permit, are hereby made a part of this permit. A copy of this chapter may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1400 Coliseum Blvd., Montgomery, AL 36130.
- b. This permit does not authorize the noncompliance with or violation of any Laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws. FWPCA, 33 U.S.C. Section 1319, and Code of Alabama 1975, Section 22-22-14.

**E. PERMIT TRANSFER, MODIFICATION, SUSPENSION, REVOCATION, AND REISSUANCE**

1. Duty to Reapply or Notify of Intent to Cease Discharge

- a. If the permittee intends to continue to discharge beyond the expiration date of this permit, the permittee shall file a complete permit application for reissuance of this permit at least 180 days prior to its expiration. If the permittee does not intend to continue discharge beyond the expiration of this permit, the permittee shall submit written notification of this intent which shall be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Administrative Code Rule 335-6-6-.09.
- b. Failure of the permittee to apply for reissuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code Rule 335-6-6-.06 and should the permit not be reissued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

2. Change in Discharge

- a. The permittee shall apply for a permit modification at least 180 days in advance of any facility expansion, production increase, process change, or other action that could result in the discharge of additional pollutants or increase the quantity of a discharged pollutant such that existing permit limitations would be exceeded or that could result in an additional discharge point. This requirement applies to pollutants that are or that are not subject to discharge limitations in this permit. No new or increased discharge may begin until the Director has authorized it by issuance of a permit modification or a reissued permit.
- b. The permittee shall notify the Director as soon as it is known or there is reason to believe:
  - (1) That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
    - (a) one hundred micrograms per liter;
    - (b) two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dini-trophenol; and one milligram per liter for antimony;
    - (c) five times the maximum concentration value reported for that pollutant in the permit application; or
  - (2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
    - (a) five hundred micrograms per liter;
    - (b) one milligram per liter for antimony;
    - (c) ten times the maximum concentration value reported for that pollutant in the permit application.

3. Transfer of Permit

This permit may not be transferred or the name of the permittee changed without notice to the Director and subsequent modification or revocation and reissuance of the permit to identify the new permittee and to incorporate any other changes as may be required under the FWPCA or AWPCA. In the case of a change in name, ownership or control of the permittee's premises only, a request for permit modification in a format acceptable to the Director is required at least 30 days prior to the change. In the case of a change in name, ownership or control of the permittee's premises accompanied by a change or proposed change in effluent characteristics, a complete permit application is required to be submitted to the Director at least 180 days prior to the change. Whenever the Director is notified of a change in name, ownership or control, he may decide not to modify the existing permit and require the submission of a new permit application.

4. Permit Modification and Revocation

a. This permit may be modified or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:

- (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to revoke and reissue this permit instead of terminating the permit;
- (2) If a request to transfer this permit has been received, the Director may decide to revoke and reissue or to modify the permit; or
- (3) If modification or revocation and reissuance is requested by the permittee and cause exists, the Director may grant the request.

b. This permit may be modified during its term for cause, including but not limited to, the following:

- (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to modify this permit instead of terminating this permit;
- (2) There are material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;
- (3) The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;
- (4) A new or revised requirement(s) of any applicable standard or limitation is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA;
- (5) Errors in calculation of discharge limitations or typographical or clerical errors were made;
- (6) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued;
- (7) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permits may be modified to change compliance schedules;
- (8) To agree with a granted variance under 301(c), 301(g), 301(h), 301(k), or 316(a) of the FWPCA or for fundamentally different factors;
- (9) To incorporate an applicable 307(a) FWPCA toxic effluent standard or prohibition;
- (10) When required by the reopener conditions in this permit;
- (11) When required under 40 CFR 403.8(e) (compliance schedule for development of pretreatment program);
- (12) Upon failure of the state to notify, as required by Section 402(b)(3) of the FWPCA, another state whose waters may be affected by a discharge permitted by this permit;
- (13) When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions; or
- (14) When requested by the permittee and the Director determines that the modification has cause and will not result in a violation of federal or state law, regulations or rules.

**5. Permit Termination**

This permit may be terminated during its term for cause, including but not limited to, the following:

- a. Violation of any term or condition of this permit;
- b. The permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance process or the permittee's misrepresentation of any relevant facts at any time;
- c. Materially false or inaccurate statements or information in the permit application or the permit;
- d. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
- e. The permittee's discharge threatens human life or welfare or the maintenance of water quality standards;
- f. Permanent closure of the facility generating the wastewater permitted to be discharged by this permit or permanent cessation of wastewater discharge;
- g. New or revised requirements of any applicable standard or limitation that is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA that the Director determines cannot be complied with by the permittee; or
- h. Any other cause allowed by the ADEM Administrative Code, Chapter 335-6-6.

**6. Permit Suspension**

This permit may be suspended during its term for noncompliance until the permittee has taken action(s) necessary to achieve compliance.

**7. Request for Permit Action Does Not Stay Any Permit Requirement**

The filing of a request by the permittee for modification, suspension or revocation of this permit, in whole or in part, does not stay any permit term or condition.

**F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION**

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a), for a toxic pollutant discharged by the permittee and such standard or prohibition is more stringent than any discharge limitation on the pollutant specified in Provision I. A. of this permit, or controls a pollutant not limited in Provision I. A. of this permit, this permit shall be modified to conform to the toxic pollutant effluent standard or prohibition and the permittee shall be notified of such modification. If this permit has not been modified to conform to the toxic pollutant effluent standard or prohibition before the effective date of such standard or prohibition, the permittee shall attain compliance with the requirements of the standard or prohibition within the time period required by the standard or prohibition and shall continue to comply with the standard or prohibition until this permit is modified or reissued.

**G. DISCHARGE OF WASTEWATER GENERATED BY OTHERS**

The discharge of wastewater, generated by any process, facility, or by any other means not under the operational control of the permittee or not identified in the application for this permit or not identified specifically in the description of an outfall in this permit is not authorized by this permit.

**PART III      OTHER PERMIT CONDITIONS**

**A.      CIVIL AND CRIMINAL LIABILITY**

1.      Tampering

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under the permit shall, upon conviction, be subject to penalties as provided by the AWPCA.

2.      False Statements

Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be subject to penalties as provided by the AWPCA.

3.      Permit Enforcement

a.      Any NPDES permit issued or reissued by the Department is a permit for the purpose of the AWPCA and the FWPCA and as such any terms, conditions, or limitations of the permit are enforceable under state and federal law.

b.      Any person required to have a NPDES permit pursuant to ADEM Administrative Code Chapter 335-6-6 and who discharges pollutants without said permit, who violates the conditions of said permit, who discharges pollutants in a manner not authorized by the permit, or who violates applicable orders of the Department or any applicable rule or standard of the Department, is subject to any one or combination of the following enforcement actions under applicable state statutes.

(1)      An administrative order requiring abatement, compliance, mitigation, cessation, clean-up, and/or penalties;

(2)      An action for damages;

(3)      An action for injunctive relief; or

(4)      An action for penalties.

c.      If the permittee is not in compliance with the conditions of an expiring or expired permit the Director may choose to do any or all of the following provided the permittee has made a timely and complete application for reissuance of the permit:

(1)      initiate enforcement action based upon the permit which has been continued;

(2)      issue a notice of intent to deny the permit reissuance. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

(3)      reissue the new permit with appropriate conditions; or

(4)      take other actions authorized by these rules and AWPCA.

4.      Relief from Liability

Except as provided in Provision II.C.1 (Bypass) and Provision II.C.2 (Upset), nothing in this permit shall be construed to relieve the permittee of civil or criminal liability under the AWPCA or FWPCA for noncompliance with any term or condition of this permit.

**B.      OIL AND HAZARDOUS SUBSTANCE LIABILITY**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the FWPCA, 33 U.S.C. Section 1321.

**C.      PROPERTY AND OTHER RIGHTS**

This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, trespass, or any infringement of federal, state, or local laws or regulations, nor does it authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the state or of the United States.



**D. AVAILABILITY OF REPORTS**

Except for data determined to be confidential under Code of Alabama 1975, Section 22-22-9(c), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential.

**E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES**

1. If this permit was issued for a new discharger or new source, this permit shall expire eighteen months after the issuance date if construction of the facility has not begun during the eighteen-month period.
2. If this permit was issued or modified to allow the discharge of increased quantities of pollutants to accommodate the modification of an existing facility and if construction of this modification has not begun during the eighteen month period after issuance of this permit or permit modification, this permit shall be modified to reduce the quantities of pollutants allowed to be discharged to those levels that would have been allowed if the modification of the facility had not been planned.
3. Construction has begun when the owner or operator has:
  - a. begun, or caused to begin as part of a continuous on-site construction program:
    - (1) any placement, assembly, or installation of facilities or equipment; or
    - (2) significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
  - b. entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under the paragraph. The entering into a lease with the State of Alabama for exploration and production of hydrocarbons shall also be considered beginning construction.

**F. COMPLIANCE WITH WATER QUALITY STANDARDS**

1. On the basis of the permittee's application, plans, or other available information, the Department has determined that compliance with the terms and conditions of this permit should assure compliance with the applicable water quality standards.
2. Compliance with permit terms and conditions notwithstanding, if the permittee's discharge(s) from point sources identified in Provision I. A. of this permit cause or contribute to a condition in contravention of state water quality standards, the Department may require abatement action to be taken by the permittee in emergency situations or modify the permit pursuant to the Department's Rules, or both.
3. If the Department determines, on the basis of a notice provided pursuant to this permit or any investigation, inspection or sampling, that a modification of this permit is necessary to assure maintenance of water quality standards or compliance with other provisions of the AWPCA or FWPCA, the Department may require such modification and, in cases of emergency, the Director may prohibit the discharge until the permit has been modified.

**G. GROUNDWATER**

Unless specifically authorized under this permit, this permit does not authorize the discharge of pollutants to groundwater. Should a threat of groundwater contamination occur, the Director may require groundwater monitoring to properly assess the degree of the problem and the Director may require that the Permittee undertake measures to abate any such discharge and/or contamination.

**H. DEFINITIONS**

1. Average monthly discharge limitation - means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).
2. Average weekly discharge limitation - means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).
3. Arithmetic Mean – means the summation of the individual values of any set of values divided by the number of individual values.

4. AWPCA - means the Alabama Water Pollution Control Act.
5. BOD – means the five-day measure of the pollutant parameter biochemical oxygen demand.
6. Bypass - means the intentional diversion of waste streams from any portion of a treatment facility.
7. CBOD – means the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand.
8. Daily discharge - means the discharge of a pollutant measured during any consecutive 24-hour period in accordance with the sample type and analytical methodology specified by the discharge permit.
9. Daily maximum - means the highest value of any individual sample result obtained during a day.
10. Daily minimum - means the lowest value of any individual sample result obtained during a day.
11. Day - means any consecutive 24-hour period.
12. Department - means the Alabama Department of Environmental Management.
13. Director - means the Director of the Department.
14. Discharge - means "[t]he addition, introduction, leaking, spilling or emitting of any sewage, industrial waste, pollutant or other wastes into waters of the state". Code of Alabama 1975, Section 22-22-1(b)(8).
15. Discharge Monitoring Report (DMR) - means the form approved by the Director to accomplish reporting requirements of an NPDES permit.
16. DO – means dissolved oxygen.
17. 8HC – means 8-hour composite sample, including any of the following:
  - a. The mixing of at least 5 equal volume samples collected at constant time intervals of not more than 2 hours over a period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
  - b. A sample continuously collected at a constant rate over period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
18. EPA - means the United States Environmental Protection Agency.
19. FC – means the pollutant parameter fecal coliform.
20. Flow – means the total volume of discharge in a 24-hour period.
21. FWPCA - means the Federal Water Pollution Control Act.
22. Geometric Mean – means the Nth root of the product of the individual values of any set of values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered one (1).
23. Grab Sample – means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.
24. Indirect Discharger – means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.
25. Industrial User – means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category “Division D – Manufacturing” and such other classes of significant waste producers as, by regulation, the Director deems appropriate.
26. MGD – means million gallons per day.
27. Monthly Average – means, other than for fecal coliform bacteria, the arithmetic mean of the entire composite or grab samples taken for the daily discharges collected in one month period. The monthly average for fecal coliform bacteria is the geometric mean of daily discharge samples collected in a one month period. The monthly average for flow is the arithmetic mean of all flow measurements taken in a one month period.

28. New Discharger – means a person, owning or operating any building, structure, facility or installation:
- a. from which there is or may be a discharge of pollutants;
  - b. that did not commence the discharge of pollutants prior to August 13, 1979, and which is not a new source; and
  - c. which has never received a final effective NPDES permit for dischargers at that site.
29. NH<sub>3</sub>-N – means the pollutant parameter ammonia, measured as nitrogen.
30. Permit application - means forms and additional information that is required by ADEM Administrative Code Rule 335-6-6-.08 and applicable permit fees.
31. Point source - means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, . . . from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. Section 1362(14).
32. Pollutant - includes for purposes of this permit, but is not limited to, those pollutants specified in Code of Alabama 1975, Section 22-22-1(b)(3) and those effluent characteristics specified in Provision I. A. of this permit.
33. Privately Owned Treatment Works – means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a "POTW".
34. Publicly Owned Treatment Works – means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.
35. Receiving Stream – means the "waters" receiving a "discharge" from a "point source".
36. Severe property damage - means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
37. Significant Source – means a source which discharges 0.025 MGD or more to a POTW or greater than five percent of the treatment work's capacity, or a source which is a primary industry as defined by the U.S. EPA or which discharges a priority or toxic pollutant.
38. Solvent – means any virgin, used or spent organic solvent(s) identified in the F-Listed wastes (F001 through F005) specified in 40 CFR 261.31 that is used for the purpose of solubilizing other materials.
39. TKN – means the pollutant parameter Total Kjeldahl Nitrogen.
40. TON – means the pollutant parameter Total Organic Nitrogen.
41. TRC – means Total Residual Chlorine.
42. TSS – means the pollutant parameter Total Suspended Solids.
43. 24HC – means 24-hour composite sample, including any of the following:
- a. the mixing of at least 12 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;
  - b. a sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected; or
  - c. a sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.
44. Upset - means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

45. Waters - means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground or surface water, wholly or partially within the state, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, Section 22-22-1(b)(2). Waters "include all navigable waters" as defined in Section 502(7) of the FWPCA, 22 U.S.C. Section 1362(7), which are within the State of Alabama.
46. Week - means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.
47. Weekly (7-day and calendar week) Average – is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week is defined as beginning on Sunday and ending on Saturday. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for the calendar week shall be included in the data for the month that contains the Saturday.

**I. SEVERABILITY**

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

**PART IV          ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS**

**A.          COOLING WATER INTAKE STRUCTURE (CWIS) REQUIREMENTS**

1.          The cooling water intake structure used by the permittee has been evaluated using available information. At this time, the Department has determined that the cooling water intake structure represents the best technology available (BTA) to minimize adverse environmental impact in accordance with Section 316(b) of the Federal Clean Water Act (33 U.S.C. section 1326).
2.          The permittee shall submit the following information at least 180 days prior to expiration of the permit:
  - a.          design intake flow of the CWIS
  - b.          percentage of intake flow, based on highest monthly average in last 5 years, used for cooling purposes;
  - c.          an estimate of the intake flow reduction at the facility based upon the use of a 100 percent (or some lesser percentage) closed-cycle re-circulating cooling water system compared to a conventional once-through cooling water system
  - d.          through screen design intake flow velocity
  - e.          any impingement and entrainment data that may have been collected based on the operation of the facility's CWIS, collected since the effective date of this NPDES permit
  - f.          a detailed description of any changes in the operations of the CWIS, or changes in the type of technologies used at the CWIS such as screens or other technologies affecting the rates of impingement and/or entrainment of fish and shellfish
3.          The permittee is required to operate and maintain the CWIS in a manner that minimizes impingement and entrainment levels. Documentation detailing the steps that have and are being taken to minimize the impingement and entrainment levels shall be maintained on site and made available upon request.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
WATER DIVISION – INDUSTRIAL AND MUNICIPAL SECTIONS  
**NONCOMPLIANCE NOTIFICATION FORM**

PERMITTEE NAME: \_\_\_\_\_ PERMIT NO: \_\_\_\_\_  
FACILITY LOCATION: \_\_\_\_\_  
DMR REPORTING PERIOD: \_\_\_\_\_

1. DESCRIPTION OF DISCHARGE: (Include outfall number (s))
2. DESCRIPTION OF NON-COMPLIANCE: (Attach additional pages if necessary):

LIST EFFLUENT VIOLATIONS (If applicable)			
Outfall Number (s)	NONCOMPLIANCE PARAMETER(S)	Result Reported (Include units)	Permit Limit (Include units)

LIST MONITORING / REPORTING VIOLATIONS (If applicable)		
Outfall Number (s)	NONCOMPLIANCE PARAMETER(S)	Monitoring / Reporting Violation (Provide description)

3. CAUSE OF NON-COMPLIANCE (Attach additional pages if necessary):
4. PERIOD OF NONCOMPLIANCE: (Include exact date(s) and time(s) or, if not corrected, the anticipated time the noncompliance is expected to continue):
5. DESCRIPTION OF STEPS TAKEN AND/OR BEING TAKEN TO REDUCE OR ELIMINATE THE NONCOMPLYING DISCHARGE AND TO PREVENT ITS RECURRENCE (attach additional pages if necessary):

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

\_\_\_\_\_  
NAME AND TITLE OF RESPONSIBLE OFFICIAL (type or print)

\_\_\_\_\_  
SIGNATURE OF RESPONSIBLE OFFICIAL / DATE SIGNED

## ADEM PERMIT RATIONALE

PREPARED DATE: April 8, 2015  
PREPARED BY: Rachel Stanaland

Permittee Name: NTS Huntsville

Permit Number: AL0056341

PERMIT IS REISSUANCE DUE TO EXPIRATION

DISCHARGE SERIAL NUMBERS & DESCRIPTIONS:

DSN001: DI Unit Flushing, non-contact cooling tower blowdown, and steam condensate

**INDUSTRIAL CATEGORY:** NON-CATEGORICAL

**MAJOR:** N

**STREAM INFORMATION:**

Receiving Stream:	Indian Creek
Classification:	Fish & Wildlife
River Basin:	Tennessee River basin
7Q10:	0.63
7Q2:	1.5
Annual Average Flow:	21.4
303(d) List:	NO
Impairment:	_____
TMDL:	NO

### DISCUSSION:

The facility does testing and engineering for the Department of Defense, Utility, and commercial clients.

ADEM Administrative Rule 335-6-10-.12 requires applicants to new or expanded discharges to Tier II waters demonstrate that the proposed discharge is necessary for important economic or social development in the area in which the waters are located. The application submitted by the facility is not for a new or expanded discharge. Therefore, the applicant is not required to demonstrate that the discharge is necessary for economic and social development.

EPA has not promulgated specific guidelines for the discharges covered under the proposed permit. Proposed permit limits are based on Best Professional Judgment. The proposed frequencies are based on a review of site specific conditions and an evaluation of similar facilities.

0011:

<u>Parameter</u>	<u>Monthly Avg Loading</u>	<u>Daily Max Loading</u>	<u>Daily Min Concentration</u>	<u>Monthly Avg Concentration</u>	<u>Daily Max Concentration</u>	<u>Sample Frequency</u>	<u>Sample Type</u>	<u>Basis*</u>
Temperature, Water Deg. Fahrenheit	-	-	-	-	86 F	Monthly	Grab	WQBEL
Radioactivity	-	-	-	-	REPORT Picrocuries per Liter	Monthly	Grab	BPJ
pH	-	-	6.0 S.U.	-	8.5 S.U.	Monthly	Grab	WQBEL
Flow, In Conduit or Thru Treatment Plant	-	REPORT MGD	-	-	-	Monthly	Instantaneous	BPJ
Chlorine, Total Residual	-	-	-	0.12	0.155 mg/l	Monthly	Grab	WQBEL
Solids, Total Dissolved	-	-	-	-	REPORT mg/l	Monthly	Grab	BPJ

\*Basis for Permit Limitation

- BPJ – Best Professional Judgment
- WQBEL – Water Quality Based Effluent Limits
- EGL – Federal Effluent Guideline Limitations
- 303(d) – 303(d) List of Impaired Waters
- TMDL – Total Maximum Daily Load Requirements



## **Discussion**

### **Best Professional Judgment (BPJ)**

The parameters of concern for this facility are based on the parameters of concern listed in EPA form 2F and from the current permit. These parameters are consistent with similar facilities in the state and have been proven to be reflective of the operations at this facility. The parameters with specific limits are discussed below:

#### **Oil & Grease**

The daily maximum limit for Oil and Grease should prevent the occurrence of a visible sheen in the stream and has been shown to be achievable through the use of proper BMPs.

#### **pH**

ADEM Administrative Code, Division 6 Regulations, specifically 335-6-10-.09(5)(e)(2)– Specific Water Quality for Fish & Wildlife classified streams states: “Sewage, industrial waste or other wastes shall not cause the pH to deviate more than one unit from then normal or natural pH, nor be less than 6.0, nor greater than 8.5 standard units.”

### **Water Quality Based Effluent Limits (WQBEL)**

#### **Temperature**

In accordance with ADEM 335-6-10-.09 (5)(e)(3)(ii), “The maximum temperature in streams, lakes, and reservoirs in the Tennessee and Cahaba River Basins, and for that portion of the Tallapoosa River Basin from the tailrace of Thurlow dam at Tallassee downstream to the junction of the Coosa and Tallapoosa Rivers which has been designated by the Alabama Department of Conservation and Natural Resources as supporting small mouth bass, sauger, or walleye, shall not exceed 86°F. Therefore, temperature limitation is continued at 86°F for this outfall.

#### **Total Residual Chlorine**

EPA’s water quality criteria for total residual chlorine of 0.019 mg/l for acute toxicity is being used as the daily maximum value for discharges into zero flow streams and meet EPA’s water quality criteria for acute toxicity in zero flow streams. The monitoring frequency will be once per month as in previous permit.

#### **Total Residual Chlorine**

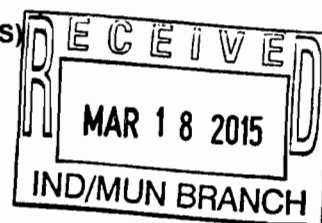
Total Residual Chlorine limitations are based upon the suggested EPA standard and a 7Q10 flow of 0.63 cfs. The calculations are shown below:

$$Acute = DailyMax(mg / l) = 0.019(mg / l) \times \frac{0.75 \times 0.63(cfs) \times 0.646(MGD / cfs) + 0.04257MGD}{0.04257MGD} = 0.155mg / l$$

$$Chronic = MonthlyAvg(mg / l) = 0.011(mg / l) \times \frac{0.65(cfs) \times 0.646(MGD / cfs) + 0.04257MGD}{0.04257MGD} = 0.12mg / l$$

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
PERMIT APPLICATION SUPPLEMENTARY INFORMATION**

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
WATER DIVISION – INDUSTRIAL / MINING PERMIT SECTION  
POST OFFICE BOX 301463  
MONTGOMERY, ALABAMA 36130-1463



**INSTRUCTIONS:** APPLICATIONS SHOULD BE TYPED OR PRINTED IN INK AND SUBMITTED TO THE DEPARTMENT IN DUPLICATE. IF INSUFFICIENT SPACE IS AVAILABLE TO ADDRESS ANY ITEM, PLEASE CONTINUE ON AN ATTACHED SHEET OF PAPER. PLEASE MARK N/A IN THE APPROPRIATE BOX WHEN AN ITEM IS NON-APPLICABLE TO THE APPLICANT.

**PURPOSE OF THIS APPLICATION**

- ☐ INITIAL PERMIT APPLICATION FOR NEW FACILITY ☐ INITIAL PERMIT APPLICATION FOR EXISTING FACILITY  
☐ MODIFICATION OF EXISTING PERMIT ☒ REISSUANCE OF EXISTING PERMIT  
☐ REVOCATION & REISSUANCE OF EXISTING PERMIT

1. Facility Name: NTS Huntsville

a. Operator Name: National Technical Systems

b. Is the operator identified in 1.a., the owner of the facility? Yes ☒ No ☐  
If no, provide the name and address of the operator and submit information indicating the operator's scope of responsibility for the facility.

2. NPDES Permit Number AL 0 0 5 6 3 4 1

3. SID Permit Number (if applicable): IU \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

4. NPDES General Permit Number (if applicable) ALG \_\_\_\_\_

5. Facility Physical Location: (Attach a map with location marked; street, route no. or other specific identifier)

Street: 7800 Highway 20 West

City: Huntsville County: Madison State: Alabama Zip: 35806

Facility (Front Gate) Latitude: 34.692464 Longitude: -86.714838

6. Facility Mailing Address (Street or Post Office Box): P. O. Box 077777

City: Huntsville State: Alabama Zip: 35807-7777

7. Responsible Official (as described on page 13 of this application):

Name and Title: Keith Wilson, Vice-President, General Manager

Address: 7800 Highway 20 West

City: Huntsville State: Alabama Zip: 35806

Phone Number: 256-837-4411

EMAIL Address: keith.wilson@nts.com

8. Designated Facility Contact:

Name and Title: Daryl Hovater, Environmental Health & Safety

Phone Number: 256-837-4411

EMAIL Address: daryl.hovater@nts.com

9. Designated Discharge Monitoring Report Contact:

Name and Title: Daryl Hovater, Environmental Health & Safety

Phone Number: 256-837-4411

EMAIL Address: daryl.hovater@nts.com

10. Type of Business Entity:

☒ Corporation ☐ General Partnership ☐ Limited Partnership

☐ Sole Proprietorship ☐ Other (Please Specify) \_\_\_\_\_

11. Complete this section if the Applicant's business entity is a Corporation

a) Location of Incorporation:

Address: 24007 Ventura Blvd.

City: Calabasas County: \_\_\_\_\_ State: CA Zip: 91302

b) Parent Corporation of Applicant:

Name: National Technical Systems (NTS)

Address: 24007 Ventura Blvd.

City: Calabasas State: CA Zip: 91302

c) Subsidiary Corporation(s) of Applicant:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

d) Corporate Officers:

Name: William C. McGinnis, President Chief Executive

Address: 24007 Ventura Blvd.

City: Calabasas State: CA Zip: 91302

Name: Derek Coppinger, Sr. Vice President

Address: 24007 Ventura Blvd.

City: Calabasas State: CA Zip: 91302

e) Agent designated by the corporation for purposes of service:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

12. If the Applicant's business entity is a Partnership, please list the general partners.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

13. If the Applicant's business entity is a Proprietorship, please enter the proprietor's information.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

14. Permit numbers for Applicant's previously issued NPDES Permits and identification of any other State of Alabama Environmental Permits presently held by the Applicant, its parent corporation, or subsidiary corporations within the State of Alabama:

<u>Permit Name</u>	<u>Permit Number</u>	<u>Held By</u>
NPDES	AL0056341	NTS Huntsville
_____	_____	_____
_____	_____	_____

15. Identify all Administrative Complaints, Notices of Violation, Directives, Administrative Orders, or Litigation concerning water pollution, if any, against the Applicant, its parent corporation or subsidiary corporations within the State of Alabama within the past five years (attach additional sheets if necessary):

<u>Facility Name</u>	<u>Permit Number</u>	<u>Type of Action</u>	<u>Date of Action</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

---

---

## SECTION B – BUSINESS ACTIVITY

1. Indicate applicable Standard Industrial Classification (SIC) Codes for all processes  
(If more than one applies, list in order of importance:

- a. 8734 \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_

2. If your facility conducts or will be conducting any of the processes listed below (regardless of whether they generate wastewater, waste sludge, or hazardous waste), place a check beside the category of business activity (check all that apply):

Industrial Categories

<input type="checkbox"/> Aluminum Forming	<input type="checkbox"/> Metal Molding and Casting
<input type="checkbox"/> Asbestos Manufacturing	<input type="checkbox"/> Metal Products
<input type="checkbox"/> Battery Manufacturing	<input type="checkbox"/> Nonferrous Metals Forming
<input type="checkbox"/> Can Making	<input type="checkbox"/> Nonferrous Metals Manufacturing
<input type="checkbox"/> Canned and Preserved Fruit and Vegetables	<input type="checkbox"/> Oil and Gas Extraction
<input type="checkbox"/> Canned and Preserved Seafood	<input type="checkbox"/> Organic Chemicals Manufacturing
<input type="checkbox"/> Cement Manufacturing	<input type="checkbox"/> Paint and Ink Formulating
<input type="checkbox"/> Centralized Waste Treatment	<input type="checkbox"/> Paving and Roofing Manufacturing
<input type="checkbox"/> Carbon Black	<input type="checkbox"/> Pesticides Manufacturing
<input type="checkbox"/> Coal Mining	<input type="checkbox"/> Petroleum Refining
<input type="checkbox"/> Coil Coating	<input type="checkbox"/> Phosphate Manufacturing
<input type="checkbox"/> Copper Forming	<input type="checkbox"/> Photographic
<input type="checkbox"/> Electric and Electronic Components Manufacturing	<input type="checkbox"/> Pharmaceutical
<input type="checkbox"/> Electroplating	<input type="checkbox"/> Plastic & Synthetic Materials
<input type="checkbox"/> Explosives Manufacturing	<input type="checkbox"/> Plastics Processing Manufacturing
<input type="checkbox"/> Feedlots	<input type="checkbox"/> Porcelain Enamel
<input type="checkbox"/> Ferroalloy Manufacturing	<input type="checkbox"/> Pulp, Paper, and Fiberboard Manufacturing
<input type="checkbox"/> Fertilizer Manufacturing	<input type="checkbox"/> Rubber
<input type="checkbox"/> Foundries (Metal Molding and Casting)	<input type="checkbox"/> Soap and Detergent Manufacturing
<input type="checkbox"/> Glass Manufacturing	<input type="checkbox"/> Steam and Electric
<input type="checkbox"/> Grain Mills	<input type="checkbox"/> Sugar Processing
<input type="checkbox"/> Gum and Wood Chemicals Manufacturing	<input type="checkbox"/> Textile Mills
<input type="checkbox"/> Inorganic Chemicals	<input type="checkbox"/> Timber Products
<input type="checkbox"/> Iron and Steel	<input type="checkbox"/> Transportation Equipment Cleaning
<input type="checkbox"/> Leather Tanning and Finishing	<input type="checkbox"/> Waste Combustion
<input type="checkbox"/> Metal Finishing	<input checked="" type="checkbox"/> Other (specify) <u>Testing and Eng.</u>
<input type="checkbox"/> Meat Products	

A facility with processes inclusive in these business areas may be covered by Environmental Protection (EPA) categorical standards. These facilities are termed "categorical users" and should skip to question 2 of Section C.

3. Give a brief description of all operations at this facility including primary products or services (attach additional sheets if necessary):

Testing and Engineering for the Department of Defense, Utility and commercial clients

---



---



---



---

---

---

## SECTION C – WASTEWATER DISCHARGE INFORMATION

Facilities that checked activities in question 2 of Section B and are considered Categorical Industrial Users should skip to question 2 of this section.

1. **For Non-Categorical Users Only:** Provide wastewater flows for each of the processes or proposed processes. Using the process flow schematic (Figure 1, pg 14), enter the description that corresponds to each process. [New facilities should provide estimates for each discharge.]

Process Description	Last 12 Months (gals/day) Highest Month Avg. Flow	Highest Flow Year of Last 5 (gals/day) Monthly Avg. Flow	Discharge Type (batch, continuous, intermittent)

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

- a. Number of batch discharges: \_\_\_\_\_ per day
- b. Average discharge per batch: \_\_\_\_\_ (GPD)
- c. Time of batch discharges \_\_\_\_\_ at \_\_\_\_\_  
(days of week) (hours of day)
- d. Flow rate: \_\_\_\_\_ gallons/minute
- e. Percent of total discharge: \_\_\_\_\_

Non-Process Discharges (e.g. non-contact cooling water)	Last 12 Months (gals/day) Highest Month Avg. Flow	Highest Flow Year of Last 5 (gals/day) Monthly Avg. Flow

2. **Complete this Section only if you are subject to Categorical Standards and plan to directly discharge the associated wastewater to a water of the State.** If Categorical wastewater is discharged exclusively via an indirect discharge to a public or privately-owned treatment works, check "Yes" in the appropriate space below and proceed directly to part 2.c .

[ ] Yes

For Categorical Users: Provide the wastewater discharge flows or production (whichever is applicable by the effluent guidelines) for each of your processes or proposed processes. Using the process flow schematic (Figure 1, pg 14), enter the description that corresponds to each process. [New facilities should provide estimates for each discharge.]

2a.

<u>Regulated Process</u>	<u>Applicable Category</u>	<u>Applicable Subpart</u>	<u>Type of Discharge Flow (batch, continuous, intermittent)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

2b.

<u>Process Description</u>	<u>Last 12 Months (gals/day) Highest Month Average*</u>	<u>Highest Flow Year of Last 5 (gals/day) Monthly Average*</u>	<u>Discharge Type (batch, continuous, intermittent)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**\* Reported values should be expressed in units of the applicable Federal production-based standard. For example, flow (MGD), production (pounds per day), etc.**

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

- a. Number of batch discharges: \_\_\_\_\_ per day
- b. Average discharge per batch: \_\_\_\_\_ (GPD)
- c. Time of batch discharges \_\_\_\_\_ at \_\_\_\_\_  
(days of week) (hours of day)
- d. Flow rate: \_\_\_\_\_ gallons/minute

Percent of total discharge: \_\_\_\_\_

2c.

<u>Non categorical Process Description</u>	<u>Last 12 Months (gals/day) Highest Month Avg. Flow</u>	<u>Highest Flow Year of Last 5 (gals/day) Monthly Avg. Flow</u>	<u>Discharge Type (batch, continuous, intermittent)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

- a. Number of batch discharges: \_\_\_\_\_ per day
- b. Average discharge per batch: \_\_\_\_\_ (GPD)
- c. Time of batch discharges \_\_\_\_\_ at \_\_\_\_\_  
(days of week) (hours of day)
- d. Flow rate: \_\_\_\_\_ gallons/minute

Percent of total discharge: \_\_\_\_\_



2d.

Non-Process Discharges (e.g. non-contact cooling water)	Last 12 Months (gals/day) Highest Month Avg. Flow	Highest Flow Year of Last 5 (gals/day) Monthly Avg. Flow

**All Applicants must complete Questions 3 – 5.**

3. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

Flow Metering	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Sampling Equipment	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>

If so, please indicate the present or future location of this equipment on the sewer schematic and describe the equipment below:

---



---

4. Are any process changes or expansions planned during the next three years that could alter wastewater volumes or characteristics? Yes ☐ No ☒ (If no, skip Question 5)

Briefly describe these changes and their anticipated effects on the wastewater volume and characteristics:

---



---

5. List the trade name and chemical composition of all biocides and corrosion inhibitors used:

Trade Name	Chemical Composition

For each biocide and/or corrosion inhibitor used, please include the following information:

- (1) 96-hour median tolerance limit data for organisms representative of the biota of the waterway into which the discharge will ultimately reach,
- (2) quantities to be used,
- (3) frequencies of use,
- (4) proposed discharge concentrations, and
- (5) EPA registration number, if applicable

## SECTION D – WATER SUPPLY

Water Sources (check as many as are applicable):

☐ Private Well

☒ Municipal Water Utility (Specify City):

☐ Surface Water

☐ Other (Specify):

**IF MORE THAN ONE WELL OR SURFACE INTAKE, PROVIDE DATA FOR EACH ON AN ATTACHMENT**

City: .00005 \*MGD Well: \_\_\_\_\_ \*MGD Well Depth: \_\_\_\_\_ Ft. Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

Surface Intake Volume: \_\_\_\_\_ \*MGD Intake Elevation in Relation to Bottom \_\_\_\_\_ Ft.

Intake Elevation: \_\_\_\_\_ Ft. Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

Name of Surface Water Source: \_\_\_\_\_

\* MGD – Million Gallons per Day

### Cooling Water Intake Structure Information

**Complete questions 1 and 2 if your water supply is provided by an outside source and not by an onsite water intake structure? (e.g., another industry, municipality, etc...)**

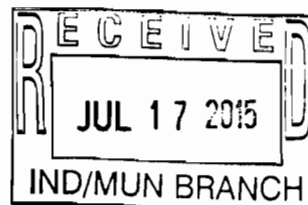
1. Does the provider of your source water operate a surface water intake? Yes ☐ No ☒  
(If yes, continue, if no, go to Section E.)

a) Name of Provider \_\_\_\_\_ b) Location of Provider \_\_\_\_\_  
c) Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

2. Is the provider a public water system (defined as a system which provides water to the public for human consumption or which provides only treated water, not raw water)? Yes ☒ No ☐  
(If yes, go to Section E, if no, continue.)

**Only to be completed if you have a cooling water intake structure or the provider of your water supply uses an intake structure and does not treat the raw water.**

3. Is any water withdrawn from the source water used for cooling? Yes ☐ No ☐
4. Using the average monthly measurements over any 12-month period, approximately what percentage of water withdrawn is used exclusively for cooling purposes? \_\_\_\_\_ %
5. Does the cooling water consist of treated effluent that would otherwise be discharged? Yes ☐ No ☐  
(If yes, go to Section E, if no, complete questions 6 – 17.)
6. Is the cooling water used in a once-through or closed cycle cooling system? Yes ☐ No ☐
7. When was the intake installed?  
(Please provide dates for all major construction/installation of intake components including screens)
8. What is the maximum intake volume?  
(maximum pumping capacity in gallons per day)
9. What is the average intake volume?  
(average intake pump rate in gallons per day average in any 30-day period)



10. How is the intake operated? (e.g., continuously, intermittently, batch)
11. What is the mesh size of the screen on your intake?
12. What is the intake screen flow-through area?
13. What is the through screen design intake flow velocity? \_\_\_\_\_ ft/sec
14. What is the mechanism for cleaning the screen? (e.g., does it rotate for cleaning)
15. Do you have any additional fish detraction technology on your intake? Yes ☐ No ☐
16. Have there been any studies to determine the impact of the intake on aquatic organisms? Yes ☐ No ☐ (If yes please provide.)
17. Attach a site map showing the location of the water intake in relation to the facility, shoreline, water depth, etc.

---

## SECTION E – WASTE STORAGE AND DISPOSAL INFORMATION

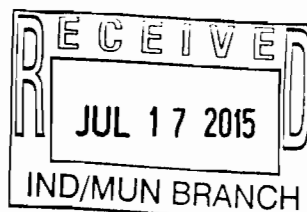
Provide a description of the location of all sites involved in the storage of solids or liquids that could be accidentally discharged to a water of the state, either directly or indirectly via such avenues as storm water drainage, municipal wastewater systems, etc., which are located at the facility for which the NPDES application is being made. Where possible, the location should be noted on a map and included with this application:

Description of Waste	Description of Storage Location
Universal Waste: Used Oil, batteries, Mercury Bulbs, recycled	Bldg. 13, curbed/contained storage area with a secondary
Hazardous Waste: Flammables, solvents, caustics & acids	containment for isolation of materials as needed

Provide a description of the location of the ultimate disposal sites of solid or liquid waste by-products (such as sludges) from any wastewater treatment system located at the facility.

Description of Waste	Quantity (lbs/day)	Disposal Method*
Universal Waste	<4	Recycled, Environmental Tech. of Alabama
Flammables & Corrosives	<1	Disposal, Environmental Tech. of Alabama

\*Indicate which wastes identified above are disposed of at an off-site treatment facility and which are disposed of on-site. If any wastes are sent to an off-site centralized waste treatment facility, identify the waste and the facility.



## SECTION D – WATER SUPPLY

Water Sources (check as many as are applicable):

- ☐ Private Well ☐ Surface Water  
☒ Municipal Water Utility (Specify City): ☐ Other (Specify): \_\_\_\_\_

**IF MORE THAN ONE WELL OR SURFACE INTAKE, PROVIDE DATA FOR EACH ON AN ATTACHMENT**

City: .00005 \*MGD Well: \_\_\_\_\_ \*MGD Well Depth: \_\_\_\_\_ Ft. Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

Surface Intake Volume: \_\_\_\_\_ \*MGD Intake Elevation in Relation to Bottom \_\_\_\_\_ Ft.

Intake Elevation: \_\_\_\_\_ Ft. Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

Name of Surface Water Source: \_\_\_\_\_

\* MGD – Million Gallons per Day

### Cooling Water Intake Structure Information

**Complete questions 1 and 2 if your water supply is provided by an outside source and not by an onsite water intake structure? (e.g., another industry, municipality, etc...)**

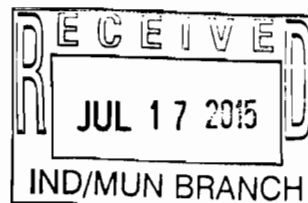
1. Does the provider of your source water operate a surface water intake? Yes ☐ No ☒  
(If yes, continue, if no, go to Section E.)

a) Name of Provider \_\_\_\_\_ b) Location of Provider \_\_\_\_\_  
c) Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

2. Is the provider a public water system (defined as a system which provides water to the public for human consumption or which provides only treated water, not raw water)? Yes ☒ No ☐  
(If yes, go to Section E, if no, continue.)

**Only to be completed if you have a cooling water intake structure or the provider of your water supply uses an intake structure and does not treat the raw water.**

3. Is any water withdrawn from the source water used for cooling? Yes ☐ No ☐  
4. Using the average monthly measurements over any 12-month period, approximately what percentage of water withdrawn is used exclusively for cooling purposes? \_\_\_\_\_ %  
5. Does the cooling water consist of treated effluent that would otherwise be discharged? Yes ☐ No ☐  
(If yes, go to Section E, if no, complete questions 6 – 17.)  
6. Is the cooling water used in a once-through or closed cycle cooling system? Yes ☐ No ☐  
7. When was the intake installed?  
(Please provide dates for all major construction/installation of intake components including screens)  
8. What is the maximum intake volume?  
(maximum pumping capacity in gallons per day)  
9. What is the average intake volume?  
(average intake pump rate in gallons per day average in any 30-day period)



10. How is the intake operated? (e.g., continuously, intermittently, batch)
11. What is the mesh size of the screen on your intake?
12. What is the intake screen flow-through area?
13. What is the through screen design intake flow velocity? \_\_\_\_\_ ft/sec
14. What is the mechanism for cleaning the screen? (e.g., does it rotate for cleaning)
15. Do you have any additional fish detraction technology on your intake? Yes ☐ No ☐
16. Have there been any studies to determine the impact of the intake on aquatic organisms? Yes ☐ No ☐ (If yes please provide.)
17. Attach a site map showing the location of the water intake in relation to the facility, shoreline, water depth, etc.

---

## SECTION E – WASTE STORAGE AND DISPOSAL INFORMATION

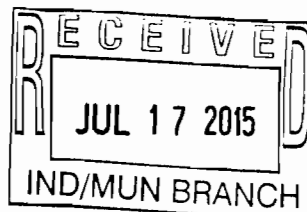
Provide a description of the location of all sites involved in the storage of solids or liquids that could be accidentally discharged to a water of the state, either directly or indirectly via such avenues as storm water drainage, municipal wastewater systems, etc., which are located at the facility for which the NPDES application is being made. Where possible, the location should be noted on a map and included with this application:

Description of Waste	Description of Storage Location
Universal Waste: Used Oil, batteries, Mercury Bulbs, recycled	Bldg. 13, curbed/contained storage area with a secondary
Hazardous Waste: Flammables, solvents, caustics & acids	containment for isolation of materials as needed

Provide a description of the location of the ultimate disposal sites of solid or liquid waste by-products (such as sludges) from any wastewater treatment system located at the facility.

Description of Waste	Quantity (lbs/day)	Disposal Method*
Universal Waste	<4	Recycled, Environmental Tech. of Alabama
Flammables & Corrosives	<1	Disposal, Environmental Tech. of Alabama

\*Indicate which wastes identified above are disposed of at an off-site treatment facility and which are disposed of on-site. If any wastes are sent to an off-site centralized waste treatment facility, identify the waste and the facility.



---

---

## SECTION F – COASTAL ZONE INFORMATION

Is the discharge(s) located within 10-foot elevation of Mobile or Baldwin County?

Yes ☐ No ☐ If yes, then complete items A through M below:

**YES** **NO**

A. Does the project require new construction?

☐ ☐

B. Will the project be a source of new air emissions?

☐ ☐

C. Does the project involve dredging and/or filling?

☐ ☐

Has the Corps of Engineers (COE) permit been received?

☐ ☐

Corps Project Number \_\_\_\_\_

D. Does the project involve wetlands and/or submersed grassbeds?

☐ ☐

E. Are oyster reefs located near the project site?

☐ ☐

(Include a map showing project and discharge location with respect to oyster reefs)

F. Does the project involve the siting, construction and operation of an energy facility as defined in ADEM Admin. Code R. 335-8-1-.02(bb)?

☐ ☐

G. Does the project involve shoreline erosion mitigation?

☐ ☐

H. Does the project involve construction on beaches and dunes?

☐ ☐

I. Will the project interfere with public access to coastal waters?

☐ ☐

J. Does the project lie within the 100-year floodplain?

☐ ☐

K. Does the project involve the registration, sale, use, or application of pesticides?

☐ ☐

L. Does the project propose to construct a new well or alter an existing well to pump more than 50 GPD?

☐ ☐

M. Has the applicable permit been obtained?

☐ ☐

---

---

## SECTION G – ANTI-DEGRADATION EVALUATION

In accordance with 40 CFR 131.12 and the Alabama Department of Environmental Management Administrative Code, Section 335-6-10-.04 for antidegradation, the following information must be provided, if applicable. It is the applicant's responsibility to demonstrate the social and economic importance of the proposed activity. If further information is required to make this demonstration, attach additional sheets to the application.

1. Is this a new or increased discharge that began after April 3, 1991?

Yes ☐ No ☒

If yes, complete question 2 below. If no, go to Section H.

2. Has an Anti-Degradation Analysis been previously conducted and submitted to the Department for the new or increased discharge referenced in question 1?

Yes ☐ No ☐

If yes, do not complete this section.

If no, and the discharge is to a Tier II waterbody as defined in ADEM Admin. Code r. 335-6-10-.12(4), complete questions A through F below and ADEM forms 311 and 313 (attached). Form 313 must be provided for each alternative considered technically viable.

Information required for new or increased discharges to high quality waters:

- A. What environmental or public health problem will the discharger be correcting?
- B. How much will the discharger be increasing employment (at its existing facility or as the result of locating a new facility)?
- C. How much reduction in employment will the discharger be avoiding?
- D. How much additional state or local taxes will the discharger be paying?
- E. What public service to the community will the discharger be providing?
- F. What economic or social benefit will the discharger be providing to the community?

---

## **SECTION H – EPA Application Forms**

All Applicants must submit EPA permit application forms. More than one application form may be required from a facility depending on the number and types of discharges or outfalls found there. The EPA application forms are found on the Department's website at <http://www.adem.state.al.us/>. The EPA application forms must be submitted in duplicate as follows:

- 1. All applicants must submit Form 1.
- 2. Applicants for existing industrial facilities (including manufacturing facilities, commercial facilities, mining activities, and silvicultural activities) which discharge process wastewater must submit Form 2C.
- 3. Applicants for new industrial facilities which propose to discharge process wastewater must submit Form 2D.
- 4. Applicants for new and existing industrial facilities which discharge only non-process wastewater (i.e., non-contact cooling water and/or sanitary wastewater) must submit Form 2E.
- 5. Applicants for new and existing facilities whose discharge is composed entirely of storm water associated with industrial activity must submit Form 2F, unless exempted by § 122.26(c)(1)(ii). If the discharge is composed of storm water and non-storm water, the applicant must also submit Forms 2C, 2D, and/or 2E, as appropriate (in addition to Form 2F).

---

## **SECTION I – ENGINEERING REPORT/BMP PLAN REQUIREMENTS**

See ADEM 335-6-6-.08(i) & (j)

## SECTION J- RECEIVING WATERS

Receiving Water(s)	303(d) Segment? (Y / N)	Included in TMDL?*
		(Y / N)
DSN001/Indian Creek		

\*If a TMDL Compliance Schedule is requested, the following should be attached as supporting documentation:

- (1) Justification for the requested Compliance Schedule (e.g. time for design and installation of control equipment, etc.);
- (2) Monitoring results for the pollutant(s) of concern which have not previously been submitted to the Department (sample collection dates, analytical results (mass and concentration), methods utilized, MDL/ML, etc. should be submitted as available);
- (3) Requested interim limitations, if applicable;
- (4) Date of final compliance with the TMDL limitations; and,
- (5) Any other additional information available to support requested compliance schedule.

## SECTION K - APPLICATION CERTIFICATION

THE INFORMATION CONTAINED IN THIS FORM MUST BE CERTIFIED BY A RESPONSIBLE OFFICIAL AS DEFINED IN ADEM ADMINISTRATIVE RULE 335-6-6-.09 "SIGNATORIES TO PERMIT APPLICATIONS AND REPORTS" (SEE BELOW).

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

"I FURTHER CERTIFY UNDER PENALTY OF LAW THAT ALL ANALYSES REPORTED AS LESS THAN DETECTABLE IN THIS APPLICATION OR ATTACHMENTS THERETO WERE PERFORMED USING THE EPA APPROVED TEST METHOD HAVING THE LOWEST DETECTION LIMIT FOR THE SUBSTANCE TESTED."

SIGNATURE OF  
RESPONSIBLE OFFICIAL:



DATE  
SIGNED: 3-2-2015

(TYPE OR PRINT)

NAME OF RESPONSIBLE OFFICIAL: Keith Wilson

TITLE OF RESPONSIBLE OFFICIAL: Vice President General Manager

MAILING ADDRESS: P. O. Box 077777

CITY, STATE, ZIP: Huntsville, AL 35807-7777

PHONE: 256-837-4411

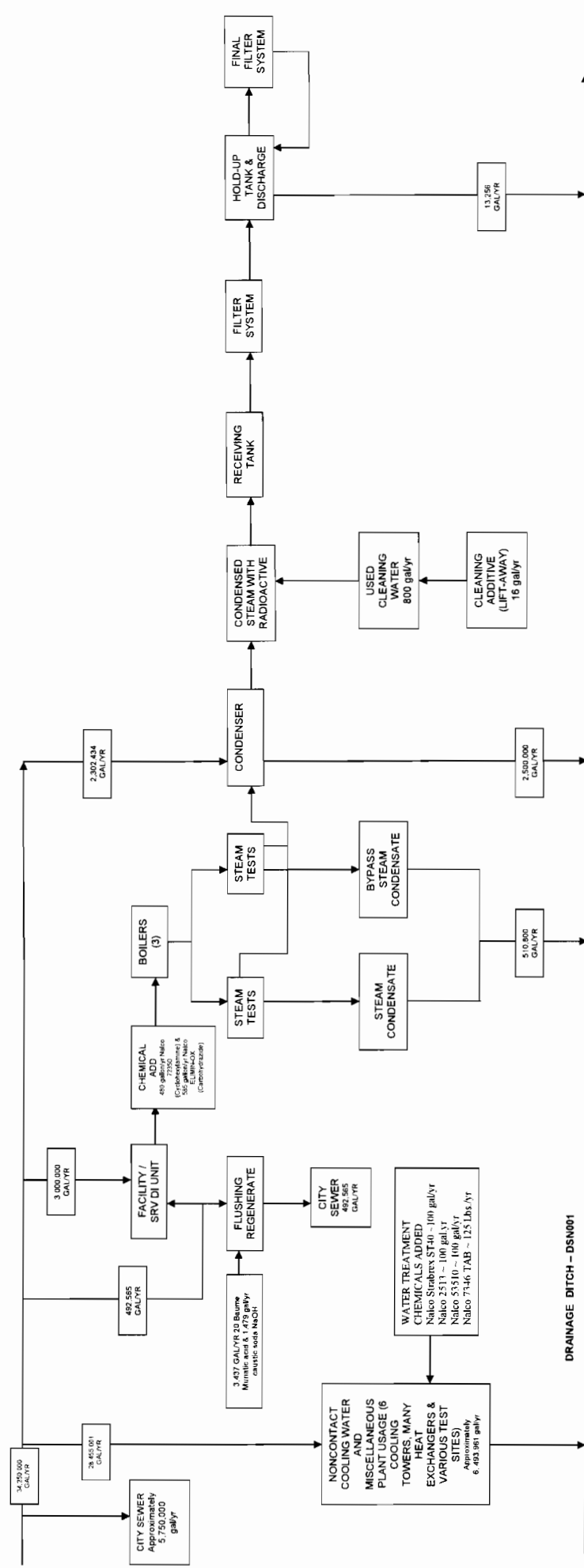
### 335-6-6-.09 SIGNATORIES TO PERMIT APPLICATIONS AND REPORTS.

- (1) The application for an NPDES permit shall be signed by a responsible official, as indicated below:
  - (a) In the case of a corporation, by a principal executive officer of at least the level of vice president, or a manager assigned or delegated in accordance with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, production, or operating facilities and is authorized to make management decisions which govern the operation of the regulated facility;
  - (b) In the case of a partnership, by a general partner;
  - (c) In the case of a sole proprietorship, by the proprietor; or
  - (d) In the case of a municipal, state, federal, or other public entity, by either a principal executive officer, or ranking elected official.



FIGURE 1

MUNICIPAL WATER TO FACILITY  
~40,000,000 gal/yr

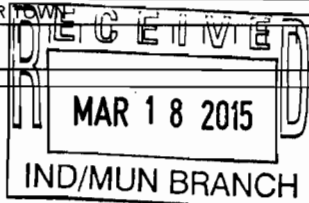


SCHMATIC OF WATER FLOW  
NATIONAL TECHNICAL SYSTEMS (NTS), INC.  
NTS HUNTSVILLE  
HUNTSVILLE, MADISON, ALABAMA


Please print or type in the unshaded areas only.

Form Approved. OMB No. 2040-0086.

FORM 1 GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.)		I. EPA I.D. NUMBER		T/A		C	
				CESQG				D	
				1		2		13 14 15	
LABEL ITEMS				GENERAL INSTRUCTIONS If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.					
I. EPA I.D. NUMBER									
III. FACILITY NAME				PLEASE PLACE LABEL IN THIS SPACE					
V. FACILITY MAILING ADDRESS									
VI. FACILITY LOCATION									
II. POLLUTANT CHARACTERISTICS									
INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of <b>bold-faced terms</b> .									
SPECIFIC QUESTIONS				Mark "X"			Mark "X"		
				YES	NO	FORM ATTACHED			
A. Is this facility a <b>publicly owned treatment works</b> which results in a <b>discharge to waters of the U.S.</b> ? (FORM 2A)					X		B. Does or will this facility (either existing or proposed) include a <b>concentrated animal feeding operation</b> or <b>aquatic animal production facility</b> which results in a <b>discharge to waters of the U.S.</b> ? (FORM 2B)		
				16	17	18			
C. Is this a facility which currently results in <b>discharges to waters of the U.S.</b> other than those described in A or B above? (FORM 2C)				X		X	D. Is this a proposed facility (other than those described in A or B above) which will result in a <b>discharge to waters of the U.S.</b> ? (FORM 2D)		
				22	23	24			
E. Does or will this facility treat, store, or dispose of <b>hazardous wastes</b> ? (FORM 3)					X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		
				28	29	30			
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)					X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		
				34	35	36			
I. Is this facility a proposed <b>stationary source</b> which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)					X		J. Is this facility a proposed <b>stationary source</b> which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		
				40	41	42			
III. NAME OF FACILITY									
1 SKIP National Technical Systems (NTS) Nts Huntsville									
				69					
IV. FACILITY CONTACT									
A. NAME & TITLE (last, first, & title)									
2 HOVATER, DARYL, ENVIRONMENTAL, HEALTH & SAFETY									
15 16 45 46 48 49 51 52 55									
B. PHONE (area code & no.)									
(256) 837-4411									
V. FACILITY MAILING ADDRESS									
A. STREET OR P.O. BOX									
3 P. O. BOX 077777									
15 16 45									
B. CITY OR TOWN									
4 HUNTSVILLE									
15 16 40 41 42 47 51									
C. STATE									
AL									
D. ZIP CODE									
35807									
VI. FACILITY LOCATION									
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER									
5 7800 HIGHWAY 20 WEST									
15 16 45									
B. COUNTY NAME									
MADISON									
46 70									
C. CITY OR TOWN									
6 HUNTSVILLE									
15 16 40 41 42 47 51 52 54									
D. STATE									
AL									
E. ZIP CODE									
35806									
F. COUNTY CODE (if known)									



CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)																									
A. FIRST										B. SECOND															
C	7	8	7	1	1	(specify) ENGINEERING SERVICES																			
15	16	17	18	19																					
C. THIRD										D. FOURTH															
C	7	(specify)									C	7	(specify)												
15	16	17	18	19																					
VIII. OPERATOR INFORMATION																									
A. NAME														B. Is the name listed in Item VIII-A also the owner?											
C	8	WYLE LABORATORIES, INC.												<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO											
15	16													55 66											
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box. If "Other," specify.)														D. PHONE (area code & no.)											
F = FEDERAL				M = PUBLIC (other than federal or state)				P		(specify)				C	A										
S = STATE				O = OTHER (specify)										(256) 837-4411											
P = PRIVATE								56						15	16	17	18	19	20	21	22	23	24	25	26
E. STREET OR P.O. BOX																									
7800 HIGHWAY 20 WEST																									
26 55																									
F. CITY OR TOWN										G. STATE	H. ZIP CODE	IX. INDIAN LAND													
C	B	HUNTSVILLE								AL	35806	Is the facility located on Indian lands?													
15	16									40 41	42 43	52 <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO													
X. EXISTING ENVIRONMENTAL PERMITS																									
A. NPDES (Discharges to Surface Water)										D. PSD (Air Emissions from Proposed Sources)															
C	T	I	AL0056341							C	T	I													
9	N									9	P														
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30										
B. UIC (Underground Injection of Fluids)										E. OTHER (specify)															
C	T	I								C	T	I													
9	U									9			(specify)												
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30										
C. RCRA (Hazardous Wastes)										E. OTHER (specify)															
C	T	I								C	T	I													
9	R									9			(specify)												
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30										
XI. MAP																									
Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.																									
XII. NATURE OF BUSINESS (provide a brief description)																									
Independent testing and engineering services for government, commercial and utility clients.																									
XIII. CERTIFICATION (see instructions)																									
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.																									
A. NAME & OFFICIAL TITLE (type or print)										B. SIGNATURE					C. DATE SIGNED										
Keith Wilson Vice President & General Manager															3-2-2008										
COMMENTS FOR OFFICIAL USE ONLY																									
C																									
15	16																								

SOUTHERN R.R.

JANE K LOWE  
PROPERTY

TVA POWER LINES

TVA EASEMENT

PINEHURST DRIVE

N

U.S. MONUMENT #1

LORINDA FARLEY  
THORNTON

U.S. MONUMENT #2

RCA  
F.M. PL.  
104

NTS  
Huntsville

J.L. LANIER

PARKING AREA

F.M. PL.  
104.00

PARKING AREA

20.00'

REDSTONE ARSENAL

ROADS ALONG HIGHWAY 20.00' HOLLOWAY

Form Approved.  
OMB No. 2040-0086.  
Approval expires 3-31-98.

**FORM  
2C  
NPDES**



U.S. ENVIRONMENTAL PROTECTION AGENCY  
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER  
**EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS**  
*Consolidated Permits Program*

A. OUTFALL NUMBER (list)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
DSN001	34	41	45	86	43	00	INDIAN CREEK

[illegible]

RECEIVED  
MAR 18 2015  
IND/MUN BRANCH

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal? <input checked="" type="checkbox"/> YES (complete the following table) <input type="checkbox"/> NO (go to Section III)								
1. OUTFALL NUMBER (list)	2. OPERATION(s) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				C. DURATION (in days)
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		B. TOTAL VOLUME (specify with units)		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
DSN001	FACILITY DI UNIT, FLUSHING	1	2		0.017			1
	NON-CONTACT COOLING WATER	7	12		0.043288			365
	FINAL PROCESS TANK	1/MONTH			0.029			1
	STEAM CONDENSATE							

<b>III. PRODUCTION</b>	
A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility? <input type="checkbox"/> YES (complete Item III-B) <input checked="" type="checkbox"/> NO (go to Section IV)	
B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)? <input type="checkbox"/> YES (complete Item III-C) <input type="checkbox"/> NO (go to Section IV)	
C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.	
1. AVERAGE DAILY PRODUCTION	
a. QUANTITY PER DAY	b. UNITS OF MEASURE
c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	
2. AFFECTED OUTFALLS (list outfall numbers)	

<b>IV. IMPROVEMENTS</b>					
A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions. <input type="checkbox"/> YES (complete the following table) <input checked="" type="checkbox"/> NO (go to Item IV-B)					
1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction. <input type="checkbox"/> MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED	
---	--

EPA I.D. NUMBER (copy from Item 1 of Form 1)

CONTINUED FROM PAGE 2

## V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
NONE	CITY WATER SUPPLY		

## VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ YES (list all such pollutants below )

☒ NO (go to Item VI-B)

CONTINUED FROM THE FRONT

**VII. BIOLOGICAL TOXICITY TESTING DATA**

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☒ YES (identify the test(s) and describe their purposes below)

☐ NO (go to Section VIII)

Analysis for radioactive isotopes in compliance with Radiation Lab License with the Alabama Department of Public Health.

Monthly analysis of water in compliance with NPDES permit DMR requirements.

**VIII. CONTRACT ANALYSIS INFORMATION**

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?


☒ YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

☐ NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
Teledyne Brown Engineering	2508 Quality Lane, Knoxville, TN 37931	(856) 690-6819	Radionuclides: BE-7; K-40; MN-54; CO-58; FE-59; CO-60; ZN-65; ZR-95; RU-103; RU-106; I-131; CS-134; CS-137; BA-140; CE-141; CE-144; RA-226; TH-228
Bio-Chem Analysis	4940 N. Memorial Parkway, Huntsville, AL	(256) 859-2161	TDS; BOD; COD; TOC; TEMP.; PH; RESIDUAL CHLORINE;

**IX. CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (type or print) KEITH WILSON, VICE PRESIDENT & GENERAL MANAGER	B. PHONE NO. (area code & no.) (256) 837-4411
C. SIGNATURE 	D. DATE SIGNED 3-2-2015



PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.  
SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)										OUTFALL NO. DSN001	
--	--	--	--	--	--	--	--	--	--	-----------------------	--

PART A—You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT										3. UNITS (specify if blank)	4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)				c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES		
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
a. Biochemical Oxygen Demand (BOD)	2.63	mg / l												
b. Chemical Oxygen Demand (COD)	<10.00	mg / l												
c. Total Organic Carbon (TOC)	1.5	mg / l												
d. Total Suspended Solids (TSS)	20.00	mg / l												
e. Ammonia (as N)	0.62	mg / l												
f. Flow	VALUE	0.042570	mgd		VALUE			VALUE				VALUE		
g. Temperature (winter)	VALUE	63.5	F		VALUE			VALUE			°C	VALUE		
h. Temperature (summer)	VALUE	86	F		VALUE			VALUE			°C	VALUE		
i. pH	MINIMUM	7.35		MAXIMUM	8.5	MINIMUM		MAXIMUM			STANDARD UNITS			

PART B—Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)		X									
b. Chlorine, Total Residual	X		0.0190								
c. Color		X									
d. Fecal Coliform		X									
e. Fluoride (16984-48-8)		X									
f. Nitrate-Nitrite (as N)		X									

## ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)				
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS		b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION (2) MASS		c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION (2) MASS	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS		b. NO. OF ANALYSES
			(1)	(2)	(1)	(2)					(1)	(2)	
g. Nitrogen, Total Organic (as N)		X											
h. Oil and Grease		X											
i. Phosphorus (as P), Total (7723-14-0)		X											
j. Radioactivity													
(1) Alpha, Total		X											
(2) Beta, Total		X											
(3) Radium, Total		X											
(4) Radium 226, Total		X											
k. Sulfate (as S <sub>2</sub> O <sub>4</sub> ) (14808-79-8)		X											
l. Sulfide (as S)		X											
m. Sulfite (as S <sub>2</sub> O <sub>3</sub> ) (14265-45-3)		X											
n. Surfactants		X											
o. Aluminum, Total (7429-90-5)		X											
p. Barium, Total (7440-39-3)		X											
q. Boron, Total (7440-42-8)		X											
r. Cobalt, Total (7440-48-4)		X											
s. Iron, Total (7439-89-6)		X											
t. Magnesium, Total (7439-95-4)		X											
u. Molybdenum, Total (7439-98-7)		X											
v. Manganese, Total (7439-96-5)		X											
w. Tin, Total (7440-31-5)		X											
x. Titanium, Total (7440-32-6)		X											

CONTINUED FROM PAGE 3 OF FORM 2-C

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
	DSN001

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	
					(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION
<b>METALS, CYANIDE, AND TOTAL PHENOLS</b>												
1M. Antimony, Total (7440-36-0)			X									
2M. Arsenic, Total (7440-38-2)			X									
3M. Beryllium, Total (7440-41-7)			X									
4M. Cadmium, Total (7440-43-9)			X									
5M. Chromium, Total (7440-47-3)			X									
6M. Copper, Total (7440-50-8)			X									
7M. Lead, Total (7439-92-1)			X									
8M. Mercury, Total (7439-97-6)			X									
9M. Nickel, Total (7440-02-0)			X									
10M. Selenium, Total (7782-49-2)			X									
11M. Silver, Total (7440-22-4)			X									
12M. Thallium, Total (7440-28-0)			X									
13M. Zinc, Total (7440-66-6)			X									
14M. Cyanide, Total (57-12-5)			X									
15M. Phenols, Total			X									
<b>DIOXIN</b>												
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1784-01-6)			X	DESCRIBE RESULTS								

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS		b. NO. OF ANALYSES
					(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS													
1V. Acrolein (107-02-8)			X										
2V. Acrylonitrile (107-13-1)			X										
3V. Benzene (71-43-2)			X										
4V. Bis (Chloromethyl) Ether (542-88-1)			X										
5V. Bromoform (75-25-2)			X										
6V. Carbon Tetrachloride (56-23-5)			X										
7V. Chlorobenzene (108-90-7)			X										
8V. Chlorobromomethane (124-48-1)			X										
9V. Chloroethane (75-00-3)			X										
10V. 2-Chloroethylvinyl Ether (110-75-8)			X										
11V. Chloroform (67-66-3)			X										
12V. Dichlorobromomethane (75-27-4)			X										
13V. Dichlorodifluoromethane (75-71-8)			X										
14V. 1,1-Dichloroethane (75-34-3)			X										
15V. 1,2-Dichloroethane (107-06-2)			X										
16V. 1,1-Dichloroethylene (75-35-4)			X										
17V. 1,2-Dichloropropane (78-87-5)			X										
18V. 1,3-Dichloropropylene (542-75-6)			X										
19V. Ethylbenzene (100-41-4)			X										
20V. Methyl Bromide (74-83-9)			X										
21V. Methyl Chloride (74-87-3)			X										

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	5. INTAKE (optional)	
					(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS
GC/MS FRACTION – VOLATILE COMPOUNDS (continued)												
22V. Methylene Chloride (75-09-2)			X									
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X									
24V. Tetrachloroethylene (127-18-4)			X									
25V. Toluene (108-88-3)			X									
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X									
27V. 1,1,1-Trichloroethane (71-55-6)			X									
28V. 1,1,2-Trichloroethane (79-00-5)			X									
29V. Trichloroethylene (79-01-6)			X									
30V. Trichlorofluoromethane (75-69-4)			X									
31V. Vinyl Chloride (75-01-4)			X									
GC/MS FRACTION – ACID COMPOUNDS												
1A. 2-Chlorophenol (95-57-8)			X									
2A. 2,4-Dichlorophenol (120-83-2)			X									
3A. 2,4-Dimethylphenol (105-67-9)			X									
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X									
5A. 2,4-Dinitrophenol (51-28-5)			X									
6A. 2-Nitrophenol (88-75-5)			X									
7A. 4-Nitrophenol (100-02-7)			X									
8A. P-Chloro-M-Cresol (59-50-7)			X									
9A. Pentachlorophenol (87-86-5)			X									
10A. Phenol (108-95-2)			X									
11A. 2,4,6-Trichlorophenol (88-05-2)			X									

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS													
1B. Acenaphthene (83-32-9)			X										
2B. Acenaphthylene (208-96-8)			X										
3B. Anthracene (120-12-7)			X										
4B. Benzidine (92-87-5)			X										
5B. Benzo (a) Anthracene (56-55-3)			X										
6B. Benzo (a) Pyrene (50-32-8)			X										
7B. 3,4-Benzo-fluoranthene (205-99-2)			X										
8B. Benzo (ghi) Perylene (191-24-2)			X										
9B. Benzo (k) Fluoranthene (207-08-9)			X										
10B. Bis (2-(4-chlorophenyl) Methane (111-91-1)			X										
11B. Bis (2-(4-chlorophenyl) Ether (111-44-4)			X										
12B. Bis (2-(4-chlorophenyl) Ether (102-80-1)			X										
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)			X										
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X										
15B. Butyl Benzyl Phthalate (85-68-7)			X										
16B. 2-Chloronaphthalene (91-58-7)			X										
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)			X										
18B. Chrysene (218-01-9)			X										
19B. Dibenzo (a,h) Anthracene (53-70-3)			X										
20B. 1,2-Dichlorobenzene (95-50-1)			X										
21B. 1,3-Dichlorobenzene (541-73-1)			X										

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)		2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)			
		a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS		b. NO. OF ANALYSES
						(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)														
22B. 1,4-Dichloro-benzene (106-46-7)				X										
23B. 3,3-Dichloro-benzidine (91-94-1)				X										
24B. Diethyl Phthalate (84-66-2)				X										
25B. Dimethyl Phthalate (131-11-3)				X										
26B. Di-N-Butyl Phthalate (84-74-2)				X										
27B. 2,4-Dinitro-toluene (121-14-2)				X										
28B. 2,6-Dinitro-toluene (606-20-2)				X										
29B. Di-N-Octyl Phthalate (117-84-0)				X										
30B. 1,2-Diphenyl-hydrazine (as Azo-benzene) (122-66-7)				X										
31B. Fluoranthene (206-44-0)				X										
32B. Fluorene (86-73-7)				X										
33B. Hexachloro-benzene (118-74-1)				X										
34B. Hexachloro-butadiene (87-68-3)				X										
35B. Hexachloro-cyclopentadiene (77-47-4)				X										
36B. Hexachloro-ethane (67-72-1)				X										
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)				X										
38B. Isophorone (78-59-1)				X										
39B. Naphthalene (91-20-3)				X										
40B. Nitrobenzene (98-95-3)				X										
41B. N-Nitro-sodimethylamine (62-75-9)				X										
42B. N-Nitrosodi-N-Propylamine (621-64-7)				X										

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED (if available)	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)												
43B. N-Nitro-sodiphenylamine (86-50-6)			X									
44B. Phenanthrene (85-01-8)			X									
45B. Pyrene (129-00-0)			X									
46B. 1,2,4-Tri-chlorobenzene (120-82-1)			X									
GC/MS FRACTION – PESTICIDES												
1P. Aldrin (309-00-2)			X									
2P. α-BHC (319-84-6)			X									
3P. β-BHC (319-85-7)			X									
4P. γ-BHC (58-89-9)			X									
5P. δ-BHC (319-86-8)			X									
6P. Chlordane (57-74-9)			X									
7P. 4,4'-DDT (50-29-3)			X									
8P. 4,4'-DDE (72-55-9)			X									
9P. 4,4'-DDD (72-54-8)			X									
10P. Dieldrin (60-57-1)			X									
11P. α-Ersofuran (115-29-7)			X									
12P. β-Endosulfan (115-29-7)			X									
13P. Endosulfan Sulfate (1031-07-8)			X									
14P. Endrin (72-20-8)			X									
15P. Endrin Aldehyde (7421-93-4)			X									
16P. Heptachlor (76-44-8)			X									



EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER DSN001
--	--------------------------

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION (2) MASS		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	b. NO. OF ANALYSES
GC/MS FRACTION - PESTICIDES (continued)												
17P. Heptachlor Epoxide (1024-57-3)			X									
18P. PCB-1242 (53469-21-9)			X									
19P. PCB-1254 (11097-69-1)			X									
20P. PCB-1221 (11104-28-2)			X									
21P. PCB-1232 (11141-16-5)			X									
22P. PCB-1248 (12672-29-6)			X									
23P. PCB-1260 (11096-82-5)			X									
24P. PCB-1016 (12674-11-2)			X									
25P. Toxaphene (8001-35-2)			X									

NTS Huntsville  
Form 2C Supplement  
Item II.B

Water usage at the Huntsville Facility averages about 40,000,000 gallons per year. The facility is served by the City of Huntsville sewer system. The typical intake of the sewer system is approximately 5,750,000 gallons annually. The discharges that are going to the sewer system are treated/processed by the City of Huntsville before they are released to the environment.

Approximately 28,455,001 gallons of the water is used in the facility cooling towers and is treated by a combination of three chemical additives: Nalco 53510; Nalco Stabrex ST40; and Nalco 7346 TAB (Material Safety Data Sheets are attached). Nalco 53510 is used at the rate of gallons/year and Nalco Stabrex ST40 at gallons/year. The chemicals are added periodically to control rust scale. The Nalco 7346 Tab is added to control algae at the rate of lbs./year. Non-contact cooling water is a major source of facility water usage. The non-contact cooling water is city water that is circulated through heat exchangers and contains no chemical or mineral additives. Approximately 6,500,000 gallons of the 40,000,000 gallons used is non-contact cooling water and is eventually routed directly to DSN001. Drainage for other use sites is not direct, and the balance of intake water is conservatively assumed to be evaporated or ground absorbed.

The Facility/SRV deionizer (DI Unit) system processed approximately 3, 000, 000 gallons of water in 2008 to remove minerals. Flushing and regeneration of this unit used approximately 492,565 gallons of city water to which 3,437 gallons of 20 Baume muriatic acid and 1,479 gallons of caustic soda (NaOH) were added. The chemicals mix during the process to achieve an approximately neutral pH. The flushing water is discharged to the City of Huntsville sanitary sewer system where it is treated and processed by the city of Huntsville before release to the environment.

About 585 gallons of carbonylhydrazide and 480 gallons of cyclohexylamine (Material Safety Data Sheets attached) are added to deionized water which is then processed through the SRV boilers and converted to steam. Approximately 30% of the steam is recovered as condensate and routed to DSN001. A small portion of the steam is passed through test specimens which are contaminated with radioactive isotopes in the form of solid metal oxides. This portion is condensed using an estimated 2,302,434 gallons per year of non-contact cooling water with no additives. The balance of the steam is released to the atmosphere as vapor, a portion of the vapor may condense and return to the ground where it is ground absorbed. The non-contact cooling water used to condense the steam is routed directly to DSN001. The contaminated condensate is collected and processed through a mechanical filter system to remove particulate radioactive material. The liquid is routed to a final process tank with a second mechanical filter system. The liquid in the final process tank is analyzed for radioactivity by an independent laboratory. Part of the release from the SRV is deionized water used in the cleaning of test specimens. An additive, Lift Away (Material Safety Data Sheet attached) is used to enhance cleaning. Lift away is used approximately 2% by volume with the deionized water.

All releases from the SRV are maintained within the allowable limits specified by the Alabama Department of Health, Division of Radiological Control. A total of about 1.64 millicurie per year is released to DSN001. The activity is distributed among isotopes Co60, Co58, Cs137, Cs134, Zn65, and Mn54 with traces of other isotopes possible. Ditch mud and water are sampled once a year with analysis by an independent laboratory to verify that radioactive material on NTS Huntsville property is maintained within the limits for release of effluent to unrestricted areas and that negligible activity is stream carried off the property.

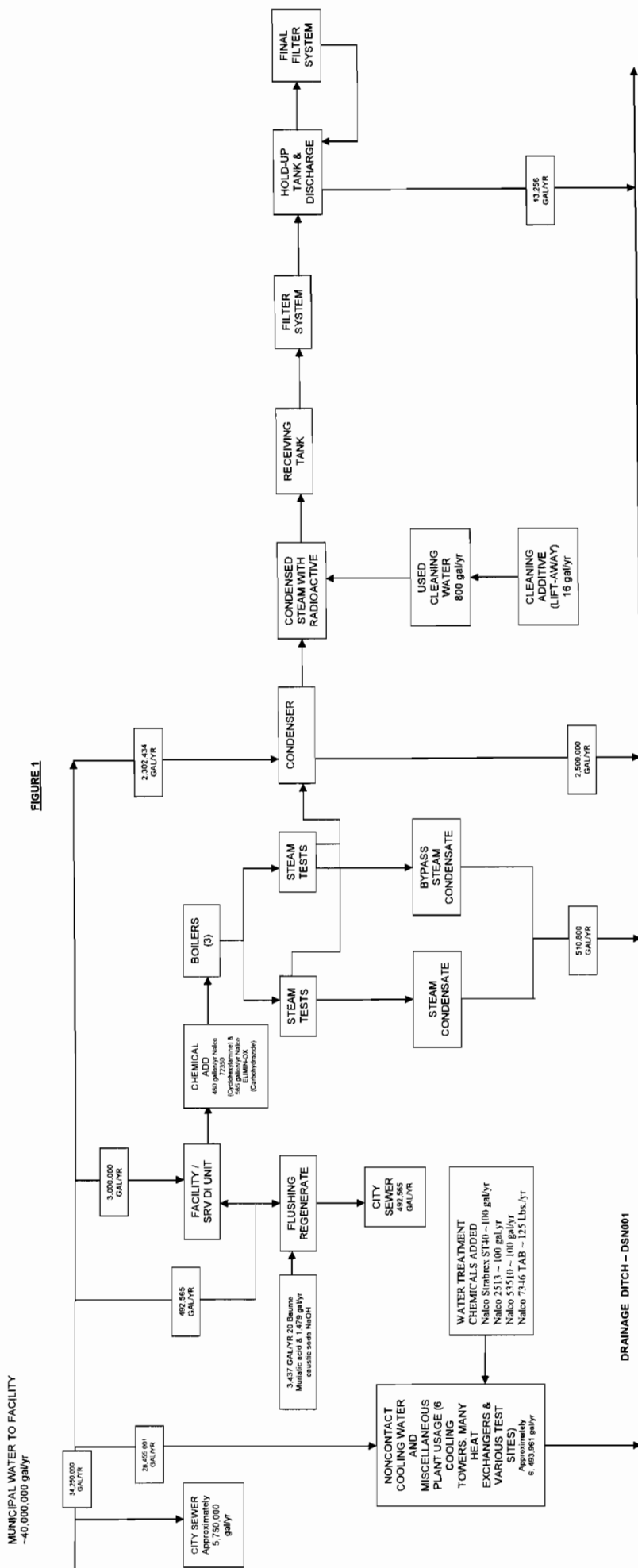


FIGURE 1

SCHEMATIC OF WATER FLOW  
NATIONAL TECHNICAL SYSTEMS (NTS), INC.  
NTS HUNTSVILLE  
HUNTSVILLE, MADISON, ALABAMA